From Face-to-Face to e-Mentoring:
Does the "e" Add Any Value for Mentors?

Celayne Heaton Shrestha
University of Sussex

Steve May
Kingston University

Palitha Edirisingha
University of Leicester

Linda Burke
*Kingston University and St. George's
University of London*

Tim Linsey
Kingston University

For many years, face-to-face peer mentoring has been a feature of learning support provided to first-year undergraduate students at one university in the UK. Building on the success of these initiatives, a scheme has been developed at this institution in which first-year undergraduates are mentored by second- and third-year students through a variety of media, both face-to-face and electronic. A research study was undertaken to evaluate the implementation of scheme, part of which involved undertaking a series of interviews with the e-mentors who participated over the course of two years. In presenting the findings, this paper discusses the commonalities that emerged and between face-to-face and e-mentoring; reflects on ways in which use of the electronic medium adds to the generic benefits of mentoring; shows that e-mentoring impacts differently on mentors and mentees; and highlights some of the particular challenges e-mentoring presents to mentors. The implications for the selection and training of mentors are discussed in the final section of the paper.

In 2002, a two-year pilot project was started to extend the University's Peer Assisted Learning Scheme (PAL) in two of its schools to include an e-mentoring component using the university's virtual learning environment (VLE), Blackboard - as the platform for the scheme, and the existing face-to-face schemes providing an initial template for the e-mentoring (Bidgood, 1994). An evaluation research project was undertaken by the university's Widening Access and Success research team (WAS) which, in addition to providing support to staff and mentors, charted the schemes' development and outcomes over the course of two years (2002-2004).

The aim of this paper is to report on one of the outcomes of the scheme: the benefits of e-mentoring for mentors. The paper explores this for those involved in mentoring generally, and then specifically, the benefits gained from the electronic component of mentoring. A brief overview of the literature is presented, followed by a description of key features of the e-mentoring schemes piloted at the university. The research methodology is then detailed followed by a discussion of the principal findings and their implications for mentoring programs. In common with previous studies of e-mentoring, the researchers found that the electronic dimension (the "e" in "e-mentoring") does offer benefits to mentors, but that using an electronic medium of communication has different implications for the mentor and mentee.

The Literature: From Face to Face to e-Mentoring

Mentoring describes a relationship where an individual receives advice, coaching and/or counseling, usually from a senior student. Successful mentoring relationships may last several years and lead to collegial friendships. Shea (1997) suggested that the term "mentor" is now synonymous with the concept of trusted adviser, friend, teacher, and wise counselor. Guest (2000) argued that mentoring is a long-term process, involves sharing experiences and offering encouragement, provides the mentee (protégé) with a way of developing insight through reflection, and is a two-way relationship that results in mutual learning. Clutterbuck (2001) suggested that mentoring is linked to apprenticeships where the apprentice works alongside a master in the craft or industry. More recently, mentoring has emerged as an organizational strategy for enabling new employees to develop into their roles and into the organization (Megginson & Clutterbuck, 1995). Indeed, mentorship relationships are now a common feature of support and learning in many businesses (Megginson & Clutterbuck, 1995) and in teacher training (Clinard & Ariav, 1998).

Over time, definitions, explanations, and models of mentoring developed away from a sponsorship model to a more developmental model (Clutterbuck, 2001; Hamilton, 1993; Hay, 1995). The latter appears to be particularly appropriate to peer-mentoring schemes within higher education (Rawlings, 2002). As a developmental process, mentoring of new undergraduates by more experienced second- and third-year students appears to fit with the qualities described by Guest (2000), who described a mentor as a wiser, trusted person; one who is suitably experienced; one who has traveled the mentee's path; a guide and someone who can stimulate professional development.

There is a body of literature concerned with evaluating mentoring programs more generally, and which includes the benefits to mentors as a secondary positive effect of mentoring (Huling & Resta, 2001). Combining these studies, it is possible to build a picture of the kinds of benefits that mentors might accrue from participating in a mentoring scheme across a diversity of industrial and academic settings. These include social benefits, such as the development of a network of supporters (Daresh, 2001), symbolic and psychological benefits and gains in personal prestige; respect and recognition from superiors as well as peers (Dutton, 2003). Participation in mentoring also appears to provide mentors with a sense of intrinsic satisfaction (Scott, 1998), enhanced self-esteem (Wollman-Bonilla, 1997), and confidence (Ehrich, Hansford & Tennent, 2004).

Mentoring has been found to help to improve mentors' skills in providing constructive feedback to others; to develop their coaching skills and learning of up-to-date technical skills (Forret, 1996; Gilles & Wilson, 2004); to develop innovative approaches to their work (Ganser, 1997); and to promote reflection on, and improvement in, their own practice (Lopez-Real & Kwan, 2005). Clinard and Ariav (1998) found that mentoring of student teachers by experienced teachers had a positive effect on the mentors' own classroom practices, but that mentors benefit from their mentoring activity when they have access to serious training and opportunities for ongoing support.

Perren (2003), in his review of academic literature, found little robust empirical evidence of successful e-mentoring. Although, some writers had highlighted the advantages of its low cost and flexibility against its limitations when dealing with interpersonal issues. A more recent review of the research literature on e-mentoring (Single & Single, 2005a) suggests that the benefits associated with e-mentoring are similar to those associated with face-to-face mentoring, including information and subject-matter transfer and psychosocial benefits such as self-esteem and confidence-building. In addition, studies of e-mentoring have identified benefits that are unique to the electronic dimension of mentoring. The most widely reported benefit is logistical; electronic communication enables mentoring relationships to transcend geographical and temporal boundaries, enabling mentoring facilities to be extended to those formerly unable to access them. E-mentoring programs can be run on a larger scale than would be feasible by relying solely on face-to-face interaction (Kasprisin, Single, Single, & Muller, 2003; Whiting & de Janaz, 2003) and with increased scale and flexibility comes the benefit of impartiality (Single & Single, 2005b). Studies of mentoring have repeatedly found that mentees find it beneficial to be paired up with a "complete stranger"

from a different organization, rather than an individual with a vested interest in the mentee's decisions. This impartiality allows the mentee to share self-doubts, express concerns and ask "silly questions," in a way that is almost impossible when mentee and mentor are from the same organization (Single & Single 2005b). The electronic medium also attenuates status differences through the concealment of the social cues that might otherwise hamper communication making for more open, honest and supportive relationships (Single & Muller, 2001). The literature on e-mentoring also suggests that more thoughtful sharing is enabled by allowing participants the opportunity to think through questions and responses, and ensures greater safety when communicating about difficult and/or personal situations (Single & Single, 2005a).

From much of the published literature, it is difficult to determine the identity of the beneficiary of e-mentoring, suggesting an underlying assumption that mentors and mentees benefit in the same way from the electronic nature of e-mentoring. Our study attempts to test this assumption.

Woodd (1999) used the phrase "telementoring" to refer to "a mentoring relationship or program in which the primary form of contact between mentor and mentee is made through the use of telecommunications media such as e-mail, list servers, etc" (p. 140). For the purposes of this study, this university subscribed to a definition of e-mentoring from Single and Muller (2001):

> A naturally occurring relationship or paired relationship within a program that is set up between a more senior/experienced individual (the mentor) and a lesser skilled individual (the mentee), primarily using electronic communications, and is intended to develop to grow the skills, knowledge and confidence of the lesser skilled individual to help him or her succeed. (p. 108)

Description of the E-Mentoring Scheme and Implementation Procedures

The University e-mentoring scheme, named *"e-Success,"* was a structured program in which second- and third-year undergraduate students supported first-year undergraduates in their own discipline area at the same institution. The mentor was intended to act a "guide" for the first-year student (mentee) providing support in relation to both academic and life skills, and referring the mentee to other support services when appropriate.

The participants were enrolled in courses with either English or Sociology as core modules; they were primarily campus-based, enabling them to participate in

face-to-face mentoring.   Geographical distance and time constraints were not the principal drivers in the decision to utilize the electronic medium; rather, it was prompted by literature related to the many potential benefits of on-line communication, for example, Salmon (2000). Salmon argued that while a lack of non-verbal and visual clues is seen by some as an inadequacy of online communication, it may also confer a range of benefits. The absence of face-to-face contact means that participants are not distracted by social games and can disagree without raised emotions, with all participants able to comfortably contribute.

Combining e-Mentoring and Face-to-Face Mentoring

The scheme made use of both electronic media (e-mail, discussion boards) and face-to-face sessions. A number of "group areas" were set up on Blackboard, specifically for the purpose of mentoring. Each mentor had his or her own "group area" (Clutterbuck, 2001) shared with his/her mentees. In addition, all students undertaking the module had access to a discussion forum, called "the common room." A third group area, "mentors' café," was created for mentors' use alone to support interaction between mentors, the module leaders, and the research team. It was used by the research team to upload e-mail templates, expenses claim forms, information about the project, and flyers, as well as to discuss issues with mentors.

In common with other commercial VLEs, Blackboard offers discussion boards, e-mail, and synchronous ("chat") facilities. Mentors were given the option of using any or all of these. Venues were identified by staff for mentors and mentees to meet face-to-face including the Academic Skills Centre (ASC), a faculty-wide "drop-in" facility (formerly manned solely by academic staff), the faculty language laboratories, and a dedicated mentoring/seminar room.

The exact blending of face-to-face and "e" components was left up to the mentors and mentees themselves. Sometimes mentoring took place through email alone; in other cases, face-to-face interaction dominated while electronic communication played a minimal role, a manner consistent with existing PAL schemes. In other cases, face-to-face and electronic media were combined in equal measure. The research team and lecturers did not prescribe any specific model; rather, they sought to offer mentors and mentees a greater range of options for mentoring, in acknowledgement of the diversity of life circumstances and communication preferences of students.

In all cases, the electronic interaction took place via e-mail. The discussion board was little used by mentees, in spite of repeated efforts by mentors to encourage their use and mentors' own postings to mentees in this space. Synchronous "chat" tools were not used by either mentors or mentees. When email was used in relation to the course, communication consisted in soliciting and proffering general information, advice and shorter academic queries; for more detailed queries and assistance, face-to-face interaction was preferred.   E-mail was used occasionally to circulate general information to all first year students that were offered the mentoring.

Face-to-face interaction was the principal means of providing emotional support and helping students to develop their confidence, although a minority preferred to use e-mail in order to discuss the personal issues affecting their progress.   It was also important to engage students with the scheme; for example, Jim, a mentor and second-year student reading Sociology and Politics, reported how he had found the face-to-face sessions helpful in giving a good impression of the mentors' capabilities and explaining how students could benefit from a mentor:

> Until that [first face-to-face] session, they weren't aware of what we were there to do… we tried to get across as best as we could what we were trying to achieve, and they were certainly responsive, they took down our details. (Jim)

For some, the electronic component of e-mentoring was only useful as a means to arrange face-to-face meetings with their mentor. Where questions between the two were found to be of potential use to the entire group, these were posted the discussion board in the "Common Room" discussion on Blackboard. They also agreed that messages of a more personal nature would be sent by e-mail, rather than through the discussion facilities in the VLE.

Selecting and Allocating Mentors to Mentees

The lecturers involved in the program selected mentors on a personal basis, following the PAL model (as opposed, for example, to advertising openly across the faculty). They identified second- and third-year students as potential mentors who they felt had both sound academic and interpersonal skills, as well as good ICT skills. Educational history, age, and other personal characteristics were not considered critical factors. A flyer prepared by the research team provided information about the mentoring scheme to assist the lecturers in approaching and enrolling potential mentors.

Like PAL, *e-Success* mentoring did not target individual "at risk students" but "high risk courses" (i.e., those modules with low student retention rates). In common with PAL again, each e-mentor worked with several students and participation was voluntary. The number of mentees to mentors varied between four and

seven. On the whole, mentees only visited a mentor other than their own for one-off "trouble-shooting" sessions. Continuity was a feature of electronic mentoring relationships.

Training e-Mentors

Eight hours of mainly face-to-face training over three days were provided with the third session involved on-line exercises (primarily on using the discussion boards). Training included giving information about the *e-Success* scheme so that students could make an informed decision about participating. The remainder of the sessions included mentors' duties, a series of group-work practical mentoring activities, and briefing by module leaders about the contents of the modules and what they expected of the mentors. The final part of the training focused on the use of the interactive tools in the VLE and included a hands-on training exercise in on-line mentoring. The mentors were subsequently employed as student helpers in induction week so as to raise the profile of mentors and mentoring; also, during the same week, a "welcome to mentoring" session, with suitable refreshments was organized.

Mentees did not undertake any formal training, but, like all new students at the university, they received a leaflet introducing them to the VLE during their induction week. During this period, a one-hour session was held in which it was explained how they could use a mentor and the benefits of mentoring. Kasprisin, Single, Single, and Muller (2003) identified this as an essential element of the training of participants in a mentoring program.

Supporting e-Mentors: e-Mentoring Materials and Coaching

The research team developed a range of materials to assist the mentors, including pre-prepared e-mail templates, activity sheets, and a set of general guidelines. The e-mail templates were designed for mentors to initiate communication with, and invite contributions from, mentees on a weekly basis. These played a similar role to the coaching messages used by Single and Muller (2001), which also contained suggestions for discussion between mentor and mentee and mentoring tips. They followed the module content closely, making reference to the course contents, titles, and deadlines for assignments and were adapted by the mentor as they saw fit.

Other forms of support by the research team included occasional informal lunches with mentors, often on a one-to-one basis, to monitor progress and provide on-going support and advice. Furthermore, mentors periodically dropped in to the researchers'

office for assistance with technology-related issues. Mentors also supported each other; this was formalized when a "mentor-buddy" system was put into place. Networking among mentors from different years/levels and subject areas was encouraged by the research team; end of term social events were organized with all mentors and staff involved in the *e-Success* scheme invited.

Researching the e-Mentoring Schemes

The impact of e-mentoring on mentors was evaluated through a continuous process of communication, data collection, and analysis during the two-year period from July 2002– June 2004. Data from the 21 participating mentors was gathered from end of year, one-to-one interviews (May 2003; May/June 2004) and regular formal group discussions (end of each semester: December 2002; April 2003; December 2003; February 2004). Informal meetings with mentors and participating staff were held throughout the two years.

The one-to-one interviews were semi-structured and aimed to encourage mentors to describe their experiences in as much depth and detail as possible. In particular, questions were asked about the differences that they had experienced between face-to-face mentoring and e-mentoring, and the different electronic media they had used (discussion board, email, chat). They were also asked to articulate how they felt they benefited from being a mentor. Data collection from group discussions included inviting mentors to describe their mentoring activities over the previous semester, the kinds of issues raised and tackled in mentoring sessions, and reflections on their experiences of mentoring. Both the group discussions and interviews were tape recorded, subsequently transcribed in full, and analyzed using the qualitative data analysis software Nvivo. Using a grounded theory approach (Glaser & Strauss, 1967), categories (themes) were developed from the data and were refined into a coding scheme. A summary of recurring themes is given in Table 1 and expounded below.

Theme 1: Generic Mentoring Benefits

This mentoring scheme reflects similar benefits for mentors as reported in the literature and include gaining organization and communication skills, increased opportunities for socializing and networking, reflecting on one's own performance, and personal satisfaction. Mentors described how they felt the mentoring scheme had helped them to develop organization and communication skills.

Table 1
Themes Arising from Interviews and Group Discussions with Mentors

Main Themes	Sub Themes
Theme 1: Generic mentoring benefits	Organization and communication skills.
	Increased opportunities for socializing and networking.
	Reflection on performance and personal satisfaction.
Theme 2: Benefits of the electronic dimension of mentoring	Fitting e-mentoring in a busy undergraduate schedule.
	Impersonality of interaction.
	Impartiality in electronic relationships.
	Targeting and reaching specific students without the risk of stigmatizing them.
	Managing mentee expectations/demands more easily.
Theme 3: The challenges of e-mentoring	Thoughtfulness and clarity of electronic communication dependent on the skills of mentor and mentee.
	Criteria for selection of e-mentors.
	Technology as a potential barrier to participation in e-mentoring.

It was quite good to try and make the effort to communicate and organize so many people. I am sure that this will be good for me later in life, for example if I become a manager or something like that. (Thomas)

Just the way you have to put things in your e-mail to your protégés [mentees]. You learn not to sound patronizing or anything like that. It makes you think. (Hannah)

Increased opportunities for socializing and networking were also identified:

Yes I certainly think it has been enlightening. I think I've taken something from it. I've met new people as well….it was a way of getting involved in the community, if you like, in the university. (Jack)

Probably being able to build up friendships … I got to know more out of my year. Working together with the other mentors was quite nice – you could talk to them. (Natalie)

Participating in the mentoring program also helped mentors to reflect upon, and improve, their own performance.

I've really enjoyed it…and it's stimulated me, it's given me an idea of what I want to do. I've learnt a lot from it, a lot about myself and my own methods and how to learn, how to write, so my stuff has improved and so has my mark alongside it… in identifying problems in other's work I can see problems in mine so yes it's worked out quite well for me, in terms of my final grade. (Linda)

[It has made a difference to how I learn and study] because …sometimes if they are doing something wrong you can pick it up in your work that you wouldn't have necessarily seen. (Louise)

Finally, mentors identified that participation in the mentoring program gave them personal satisfaction.

The plus side is definitely the feeling of actually helping people, which is nice. To feel that you could at least potentially make a difference. (Simon)

…it's a very nice feeling when you first meet someone, and they're struggling and upset and they're stressed, and you can help them to feel calm and see the wider picture…You do see a difference in their behavior and how they are thinking, and they're happy at the end of it, which is really nice. (Louise)

One of the comments that was said to me at the end …"You helped me understand Sociology but more than that you helped me understand that I was better than I had perceived myself". So I'd actually hit the target and it was lovely. That comment that was my inspiration. (Elaine)

Theme 2: Benefits of the Electronic Dimension of Mentoring

The research also illuminated the benefits of the electronic dimension of mentoring. Some of these reflect the literature, including being able to fit e-mentoring into a busy schedule, and how e-mentoring helped to minimize the status difference between mentor and mentee. However, other findings emerged that do not appear in previous literature including being able to target specific students without stigmatizing them, being able to reach out to more students and managing mentees expectations.

Fitting e-mentoring in a busy undergraduate schedule. The flexibility in mentoring hours through e-mentoring emerged from the research as a positive factor for mentors. Flexibility was one of the factors that had attracted a number of mentors to the scheme, particularly those with dependants and in part-time

employment. Simone, a Linguistics and Languages mature student with two children aged 5 and 9, was such a mentor. She began attending the mentees' regular seminars as an opportunity for face-to-face mentoring. However, she soon began to feel that the seminar lecturer did not made effective use of her time and started to use this venue less frequently. She did not, however, withdraw from the program altogether, choosing instead to continue mentoring in the university's Academic Skills Centre (ASC), which she found more productive. She also decided to more fully exploit the capacities of the electronic environment at her disposal: she set up her home page and wrote her personal profile, with her photograph and contact details on Blackboard. Other mentors commented:

> think that is the advantage of the whole [e-mentoring] thing. It's a convenience for them and us… It's great to have a meeting every now and again just to catch up informally. That is the beauty of the e-thing, it doesn't take much time. You don't have to run round as much. (Nicola)

> I never found fitting it [e-mentoring] around my studies a problem - you always have a moment. The real problem came when I tried to get everyone to meet up. (Jenny)

Impersonality of interaction. Mentors' opinions were mixed regarding the impersonality of online interaction. It was clearly valued by some mentors, Hannah, for example, felt she could be more socially effective in an online environment. When mentors were first instructed to make contacts with their seminar groups face-to-face, she expressed that she preferred "not to do the face-to-face meetings." Others mentors were ambivalent towards the impersonality of electronic communication; Nicola, an English language mentor, commented that an advantage of e-mentoring was that: "…it is impersonal. You don't have to reveal everything…". On the other hand, she continued,

> There is also the disadvantage that it is impersonal. Maybe a drop-in session would be the best some of the time because you know that there is someone there who you can talk to in person. (Nicola)

Susan, from her experiences as both a mentor and mentee, highlighted that impersonality had different implications for mentor and mentee:

> [As a mentor] I prefer going into the session and saying, "Hello, I'm so and so" because you can get an idea of what they're thinking, and you can tell if they're being lazy or what their struggles are. I remember once pointing something out to someone

and she said "Huh, I see what you mean…" and she didn't - I saw her frown and I saw a very vacant face so it meant I could say: "Ok, well maybe we should work on this a little bit more"; If you are just doing something on the discussion board or the e-mail you're just passing on information and hoping that they are taking it in. But then again, discussion boards are impersonal …face-to-face, you are looking at their facial expression thinking, "they're thinking this is rubbish" whereas on discussion boards or e-mail, you don"t have to have that boundary of wondering what your mentor is thinking. (Susan)

This suggests that the impersonality of the electronic medium may be a perceived as beneficial for mentees, but less so for mentors, highlighting that mentor and mentee do not benefit equally from the aspects of electronic communication and that it has different implications for each.

Impartiality in electronic relationships. Mentors did not generally comment on the advantages of the electronic medium in overcoming status differences, which other researchers found to be a major advantage of electronic mentoring (Single & Muller, 2001). One exception was Nicola, who felt that the similarities between herself and students (in terms of age, in this instance), undermined her ability to establish the authority that she felt was necessary for mentoring relationships to be effective. She recalled her experience of seminar groups: "I had the feeling I was one of the students." She reported unease at being asked by the seminar students whether she was their mentor or not, and said she was taken aback when students left the seminar room after the lecturer left. This suggests that issues of status may be as significant for mentors as they are for mentees, and reflects that some mentors perceive their role within a sponsorship model of mentoring as described by Hamilton (1993).

Targeting and reaching specific students without the risk of stigmatizing them. Although face-to-face introductions in the induction week were important for increasing the visibility of the scheme, some students would not have taken advantage of the *e-Success* scheme had they not been contacted electronically. Mentors found that the electronic medium was effective as a means to target specific students without the risk of singling students out.

Catherine, a second year student studying Sociology and Linguistics, worked as a mentor during the academic year 2003 – 2004. Her mentoring approach combined face-to-face and electronic methods. She took part in weekly face-to-face seminars, managed a discussion forum on Blackboard, and e-mailed students on a regular basis. Catherine e-mailed each student in her seminar group individually,

asking about their assignments and coursework, and offering to help. She particularly targeted students who had not handed in assignments. She felt the method worked well; a number of students seemed anxious that she had e-mailed them, while most of them were

> …really pleased actually about the e-mail because I sent each an individual e-mail…since I sent the e-mails out, I've been slowly getting replies back from them saying, basically "Thank you" and then explaining what the problem is… asking me what they can do or...telling me their problems and a lot of personal things and [reasons] why they haven't been able to get their assignments in. (Catherine)

Managing mentee expectations/demands more easily. A small number of mentors reported feeling uncomfortable in the ASC, as this was a place where students from discipline areas other than their own and students other than their allocated mentees could approach them. These mentors felt that students' expectations of them in terms of skills and experience, often exceeded – or risked exceeding - their current abilities and experience.

Jim was allocated two seminar groups in each semester. He also attended the ASC to support students who brought their assignment work, seeking advice on the content of the material. Jim, however, was unhappy about having been in a situation where students were seeking his advice on content and on subject areas outside his expertise. By contrast, he found the dedicated mentoring room in the faculty building, e-mail, and discussion boards, far more comfortable venues and media for mentoring.

This was not the case for all mentors. Linda, for instance, was keen to assist students from other discipline areas (within the field of arts and social sciences). She would point out the limits of her expertise to students seeking her help, while advising them as far as she could by giving examples from her own subject area.

Theme 3: The Challenges of e-Mentoring

Concern was expressed by e-mentors about accepting uncritically the view that the electronic medium necessarily made for clearer, more "thoughtful" communication than can be achieved face-to-face. Additionally, the experience of mentors showed that electronic communication can be ambiguous, and can require clarification through a face-to-face meeting. The thoughtfulness and clarity of electronic communication depended on the skills of both the mentor and mentee.

Not all mentors were comfortable with interaction in the electronic medium. Indeed, many felt they had to "convert" the electronic into face-to-face. This suggests that selection criteria for mentors may need to be rethought when the scheme involves e-mentoring. A mentor with good face-to-face skills may not be as effective when communicating electronically. Conversely, a mentor can feel self-conscious in face-to-face interaction yet may be highly skilled at establishing and maintaining relationships electronically, and communicating clearly in this medium.

Finally, the data showed that technology could act as a barrier to participation in the scheme. While academic staff tended to assume high levels of computer literacy among the young undergraduates, this was not supported by the evidence from the study. Almost all the mentors had encountered students who did not know how to use Blackboard and/or the University's e-mail system. Mentors, mature and young, also commented on their own difficulties with the technology:

> I thought [the university] computer system was quite daunting at first. I remember Steven showing me how to use it because it is a different lay-out and various programmes to be used and how to get on to the internet as well as how to get onto Blackboard from the Home Page. I think they [students] will probably need to be shown that. They will probably be more IT literate than I was as they are all doing IT at school now. (Gwen)

Any assumption that e-mentoring brings greater accessibility is, therefore, questionable. There are training implications for both mentors and mentees. One solution, that mentors in this scheme devised and adopted, is for mentors themselves to identify any ICT training needs among their mentees and conduct a hands-on ICT induction for the latter when necessary. This presupposes that mentors themselves will be given a thorough training in the use of whichever electronic media are used for mentoring.

Conclusion

This study broadly supports the literature in finding that the benefits to mentors of face-to-face and e-mentoring are largely similar. As in the former, participation in the latter gave a number of positive outcomes including the development of organizational and communications skills, greater opportunities to network and socialize, an incentive to reflection - which in turn, led to improvements in their own practice and performance, and a sense of personal satisfaction. This work also supports the thesis that the electronic dimension offers added benefits to mentors such as fitting into a busy schedule and minimizing status

differences with mentees. Other findings give additional insights: how the electronic medium allowed for mentoring to target students without stigmatizing them, how e-mentoring reached out to more students, and how it enabled mentors to better manage the expectations of mentees.

The attenuation of status differences brought about by the electronic medium, allowing for issues including educational level, authority, and age to not impinge on mentoring activities were clearly advantageous for both mentor and mentee. On the other hand, the perceived impersonality of this form of mentoring was seen to aid mentees, but was felt to be less helpful for mentors. It is thus apparent that the electronic medium of communication had different benefits for mentor and mentee within the mentoring relationship and that when trying to illuminate the benefits of e-mentoring, each time a benefit is uncovered, we need to ask, "*Who is benefiting?*"

Our findings suggest that while e-mentoring may be more accessible to those for whom time and geographical distance are obstacles to participation, it can act as a barrier to participation in a mentoring scheme through making it less accessible for those unfamiliar with computers and the Internet technology. Claims that the "e" *ipso facto* makes e-mentoring more accessible are thus arguable. However, the challenges were not just technological; to be effective in this new medium required skills other than those of a good "face-to-face" mentor. Indeed, several mentors were uncomfortable with interaction via email and discussion boards, even where they were technologically proficient. Our findings suggest that universities need to rethink the qualities of a "good e-mentor" and whether these are the same as those of a face-to-face mentor, but with added ICT skills. This raises questions about whether the emphasis in selecting e-mentors should be on written communication skills, and not (or not only) oral ones. This study challenges the view that the electronic medium necessarily makes for clearer, more "thoughtful" communication than can be achieved face-to-face.

We conclude that implementation of e-mentoring schemes should include a thorough training of mentors in the use of ICT and an audit of mentee ICT familiarity needs with mentee training provided as part of any e-mentoring program. With such provisions in place, e-mentoring may be a step closer to living up to the many expectations of this increasingly popular form of educational and professional development support.

References

Bidgood, P. (1994). The success of SI – the statistical evidence. In C. Rust & J. Wallace (Eds.), *Helping students to learn from each other: Supplemental instruction* (pp. 71-80). Birmingham, England: Staff and Educational Development Association.

Clinard, L. M., & Ariav, T. (1998). What mentoring does for mentors: A cross-cultural perspective. *European Journal of Teacher Education*, *21*(1), 91-108.

Clutterbuck, D. (2001). *Everyone needs a mentor* (2ⁿᵈ ed.). London: Chartered Institute of Personnel and Development.

Daresh, J. (2001). *Leaders helping leaders: A practical guide to administrative mentoring.* Thousand Oaks, CA: Corwin Press.

Dutton, C. (2003). Mentoring: The contextualization of learning - mentor, protégé and organizational gain in higher education. *Education & Training, 45*(1), 22-29.

Ehrich, L. C., Hansford, B., & Tennent, L. (2004). Formal mentoring programs in education and other professions: a review of the literature. *Educational Administration Quarterly*, *40*(4), 518-540.

Forret, M. L. (1996). Issues facing organizations when implementing formal mentoring programmes. *Leadership and Organization Development Journal*, *17*(3), 27-30.

Ganser, T. (1997, April). *Promises and pitfalls for mentors of beginning teachers*. Paper presented at the Conference on Diversity in Mentoring, Tempe, AZ. (ERIC Document Reproduction Service No. ED407379)

Gilles, C., & Wilson, J. (2004). Receiving as well as giving: Mentors' perceptions of their professional development in one teacher induction program, *Mentoring and Tutoring*, *12*(1), 87-106.

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Hawthorne, NY: Aldine de Gruyter.

Guest, G. (2000). *Coaching and mentoring in learning organizations*. Paper presented at 5th International ASHRM Conference, Manama, Bahrain.

Hamilton, R. (1993). *Mentoring.* London: The Industrial Society.

Hay, J. (1995). *Transformational mentoring: Creating developmental alliances for changing organizational cultures*. Maidenhead: McGraw-Hill.

Huling, L., & Resta, V. (2001). Teacher mentoring as professional development. (ERIC Digest ED460125). Retrieved May 15, 2007, from http://www.ericdigests.org/2002-3/mentoring.htm

Kasprisin, C. A., Single, P. B., Single, M., & Muller, C. (2003). Building a better bridge: Testing e-training to improve e-mentoring programmes in higher education. *Mentoring & Tutoring*, *11*(1), 67-78.

Lopez-Real, F., & Kwan, T. (2005). Mentors' perceptions of their own professional development during mentoring. *Journal of Education for Teaching, 31*(1), 15-24.

Megginson, D., & Clutterbuck, D. (1995). *Mentoring in action: A practical guide for managers.* London: Kogan Page.

Perren, L. (2003). The role of e-mentoring in entrepreneurial education and support: A meta-review of academic literature. *Education & Training*, *45*(8/9) 517-525.

Rawlings, M. (2002). *What is mentoring?* Retrieved May 15, 2007, from http://www.edu.salford.ac.uk/docs/Mentoringonlinepaper.rtf

Salmon, G. (2000). *E-moderating: The key to teaching and learning online*. London: Kogan Page.

Scott, N. (1998, May). *Careful planning or serendipity? Promoting well-being through teacher induction.* Paper presented at the Annual Meeting of the Canadian Society for the Study of Education, Ottawa, Canada. (ERIC Document Reproduction Service No. ED420627)

Shea, G. F. (1997). *Mentoring* (Rev. ed.). Menlo Park, CA: Crisp Publications.

Single, P. B., & Muller, C. B. (2001). When email and mentoring unite: The implementation of a nation-wide electronic mentoring program. In L. K. Stromei (Ed.), *Creating mentoring and coaching programs: Twelve case studies from the real world of training* (pp. 107-122). Alexandria, VA: American Society for Training and Development.

Single, P. B., & Single, R. M. (2005a). E-mentoring for social equity: A review of research to inform program development. *Mentoring and Tutoring, 13*(2), 301-320.

Single, P. B., & Single, R. M. (2005b). Mentoring and the technology revolution: How face-to-face mentoring sets the stage for e-mentoring. In F. K. Kochan & T. Pascarelli (Eds.), *Creating successful tele-mentoring programs* (pp. 7-29). Greenwich, CT: Information Age Publishing.

Whiting, V., & de Janaz, S. C. (2003). Mentoring in the 21st century: Using the internet to build skills and networks. *Journal of Management Education, 28*(3), 275-293.

Wollman-Bonilla, J. (1997). Mentoring as a two-way street. *Journal of Staff Development*, *18*(3), 50-52.

Woodd, M. (1999). The Challenges of Tele-mentoring. *Journal of European Industrial Training*, *23*(3), 140-144.

_____

CELAYNE HEATON SHRESTHA is currently Research Fellow in the anthropology department of the University of Sussex, Brighton, UK. She is working on a research project under the LSE-based and ESRC funded Non-Governmental Action Program, exploring the nature of public action under conditions of civil conflict and post-conflict contexts. Prior to this, she had worked as research fellow on the *WAS* project at Kingston University (2002-2005) (e-learning to support non-traditional students" preparation for HE and for undergraduates" development of deep approaches to learning).

STEVE MAY is a Senior Researcher in the Academic Development section at Kingston University UK. Formerly a lecturer in the Further Education sector, he is involved in research into the implementation of policy designed to address the needs to students from non traditional backgrounds through the building mechanisms that support fuller staff engagement. His current work focuses on evaluating the impact of initiatives designed to support the student transition into Higher Education and subsequent progression through to graduation and employment.

PALITHA EDIRISINGHA is a Lecturer in E-Learning at the Beyond Distance Research Alliance, The University of Leicester, UK. He co-investigates the IMPALA project (HEA and HEFCE funded) and the WoLF project (JISC funded). His research interests include: mobile learning, transfer of informal learning from Web2.0 technologies for academic learning, and learning technologies for development. His completed research projects: WAS (e-learning to support non-traditional students" preparation for HE and for undergraduates" development of deep approaches to learning (Kingston University, 2002-2005); ETGACE (Education and Training for Governance and Active Citizenship in Europe (University of Surrey, 2000-2002); Basic Education in Developing Countries (IRFOL, 1998-2000).

LINDA BURKE is the Associate Dean for Practice Education, Head of Undergraduate Nursing and Reader in Nursing, in the Faculty of Health and Social Care Sciences, Kingston University and St George"s, University of London. She has teaching and management experience gained from working in senior positions within the Department of Health, and within NHS and higher education organizations. She has published in a number of areas, notably regarding student support in higher education, health care education, and exploring the relationship between education policy and its impact in practice.

TIM LINSEY is the head of E-Learning at Kingston University.