The Student-Staff Mentoring Project at the University of Hertfordshire

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Abstract: Peer mentoring has been used by some institutions in order to help those who are less able at something to improve, by pairing them with a mentor of a similar background. Mentoring has been used in academic milieus, where one student will help another, and in more professional milieus where one colleague is paired to help another colleague. Mentoring of both types is already widely used at the University of Hertfordshire (UH) in the UK. However, the current project has a twist to it. What if we were to take the former part of the student mentoring example and the latter part of the colleague mentor example – reverse mentoring? In this paper, we share the results of this question, what happens when you mix it up and a student becomes a lecturer's mentor?

1.0 Introduction

The research described below presents a case study exploring the experiences of the University of Hertfordshire's Business School when it developed a Student Mentor project. The project was established in 2006 by Jenny Evans in an attempt to bridge a skills gap that some lecturers were experiencing in their use of blended learning technologies and applications, by using students who *were* comfortable working with these technologies. The University of Hertfordshire has placed great emphasis on the increased use of blended learning as integral to the delivery of all its campus-based programmes. Thus it was also important that its academic affiliates and staff members know how to make best use of technologies to enhance learning. However, lecturers do not always have time to attend training sessions in addition to teaching *and* making time for meeting their students. It was decided to invite those already 'tech-savvy' students to mentor the lecturers. The results from this project indicate that this type of mentoring project is not only sustainable (year on year), but can also be transferable (from one academic School to another). Therefore, it should also be sustainable and transferrable from one institution to the next. While the current case is presented from a local point of view, it is proposed that it could also be applied across other academic institutions.

1.1 Peer Mentoring in Higher and Further Education

Much has been written about mentoring projects and their benefits and disadvantages. Topping (1996) for example lists, cross-year small-group mentoring, the Personalised System of Instruction, Supplemental Instruction, same-year dyadic fixed-role mentoring, same-year dyadic reciprocal peer mentoring, dyadic cross-year fixed-role peer mentoring, same-year group mentoring, peer assisted writing and peer assisted distance learning. More recently, e-learning peer mentoring (van Rosmalen 2008) has been added to this list of types of peer mentoring. In a literature review of the different types of peer mentoring up to 1996, Topping (1996) not only tries to define the ever-evolving concept of (peer) mentoring, but also suggests a series of advantages and disadvantages associated with peer mentoring. With regards to defining peer mentoring, Topping (1996: 322) describes it as "a form of specific role taking where each person has a distinct role; one of them is the mentor and one is the mentee".

On the advantages of peer mentoring, Topping (1996) summarizes that peer mentoring of the kinds that were mentioned (except for peer mentoring via e-learning), from the mentees' perspective are as follows: "a more active, interactive and participative learning, immediate feedback, swift prompting, and lowered anxiety" (Topping 1996: 324-325). It has also been proposed that mentees felt that peer mentors were better than staff mentors at understanding and attempting to solve their problems, were less authoritarian, and more focused on the task at hand (Moust and Schmidt 1994). In addition, mentees have reported feeling more confident after being taught something (Topping 1996). From the mentors' perspective, Topping (1996: 325) summarizes that mentors have shown "cognitive gains, improved retention, greater meta-cognitive awareness and better application of knowledge and skills to new situations". He reported that mentors experienced more commitment to helping the mentee, an increased sense of self-esteem, an increased reporting of their self-confidence, as well as increased empathy with others (Topping 1996).

However, there are problems that a peer mentoring project can run into as summarized by Topping (1996). These might include the quality of mentoring that the mentees receive, the time it takes to teach the mentor what he or she will, in turn, teach the mentee, as well as problems regarding the quality of the mentoring. Another disadvantage that has come to the fore is that of peer selection. Although Goethals et al. (2004) have reported that people will always choose to be with those who are like them, when a mentee is allocated to a mentor that they do not get along with, results are not always positive. However, it was found that across all peer mentoring

projects, the best results were when mentors give more information, and when the mentee asked for clarification and the main points to recall (Topping 1996).

The research for these advantages and disadvantages, or why a mentoring project does or does not work, comes from a range of backgrounds; it is often down to the pairing of the mentor and the mentee (van Rosmalen 2008), but there are other reasons as well. For example, Fruchter and Lewis (2000) have pointed out that mentors who only see a problem from one point of view, usually their own point of view (from the perspective of their course/academic background), fail to think 'outside the box' and although they may come up with a solution to the problem, they are too focused on the problem itself, rather than the problem in relation to their mentee. More specifically, has the problem been solved in this one instance, or has the mentee learned how to solve it? Thus, is the approach to solving the problem useful for future problems or problem-specific to that one instance? Wenger (1998) has stated that problems are best resolved in a proactive way, through discourse, discussion, and an understanding of disciplinary differences. It is through a shared experience like this that both the mentor and the mentee get the most out of the experience, because it is the positive and proactive engagement that counts the most (Fruchter & Lewis 2000).

1.2 Reverse Mentoring Examples

According to Greengard (2003), 'reverse mentoring' was first given real consideration in the early 1990s, but only became a serious method of knowledge transfer in the latter part of the decade. In fact, Jenny Evans reporting on anecdotal evidence noted that, "back in the early 90s when some of the business students went out on a year's work placement, part of their job often consisted of helping their 'bosses' to use their computers better, and this was at a time before the internet as we know it now".

Some of the institutions that have used a reverse mentoring model include General Electric, Proctor and Gamble, Philip Morris and Siemens. In addition, during the summer of 2002, female students in some of Seattle's public schools helped their teachers with computers and technology, and positive feedback has also come from a reverse mentoring project at the University of Pennsylvania's Wharton Fellows Business program, where MBA candidates and undergraduates helped top executives with technology. As Miller (2001) reports, it is necessary for those in a business setting to keep up-to-date with technology, if not, it is their business that will suffer, and in a technology-laden, blended learning 'business', lecturers have to keep up-to-date too. So, one way to bridge an age gap in the use of technology is to get the help from those who "are born on the Internet" (Miller 200: http://genyes.com/news/mindsofbabes).

Apart from the reference to reverse mentoring in some of Seattle's public schools, this new and evolving concept also gathered pace in academic settings. In 1996, Generation WHY (now Generation Yes, or simply GenYes) (http://www.genyes.org/programs/genyes/research) was launched. GenYes states that it

> "is the only student-centered research-based solution for school-wide technology integration. Students work with teachers to design technology-infused lessons and provide tech support. GenYES students learn how to help teachers integrate technology into their lessons, how to use school technology, and how to provide tech support." (http://www.genyes.org/programs/genyes/whatis).

Although variations of this reverse mentoring approach do exist, such as younger students helping out university students (Christie et al. 2004), for the most part, GenYES only works with students and teachers in the kindergarten through to the 12th grade system, and as the explanation above describes, students only work with technology within the classroom. The GenYes program has been adopted by a number of academic institutions, all of which have had positive feedback and outcomes, including accommodating a number of different learning styles and an improved quality of learning (Christie et al. 2004).

Positive feedback arose from two reverse mentoring projects from University College London and Royal Free and University College Medical School, Centre for Health Informatics and Multi-professional Education (CHIME) (Murphy & Adams 2005). Although the mentees had originally agreed to the project to fill in their knowledge gap with regards to using applications such as email, Excel and Word, they reported gaining a lot more. Not only did doctors have that gap filled (89% found the program to be very useful), but they also saved time, as mentors would come to them when it suited them, doctors learned how to use the applications on their own, and managed files better in a collaborative and non-threatening way. In addition, it proved to be a cost-effective way of providing IT training, being time saving, and with a greater understanding and appreciation of both mentors' and mentees' real-life clinical roles. From the mentors' point of view, they reported improved communication skills and became better teachers in the process. They learned to be flexible by accommodating the individual needs of the doctors. The mentors gained insight into the daily issues doctors have to go through vis-à-vis technology-related issues (Murphy & Adams 2005). Although this is interesting, and shows that mentors can influence far superior (in standing) mentees, the types of technology and applications these mentors dealt with, was less advanced than the current Student Mentor case study. The current student mentor

programme at the University of Hertfordshire is slightly different, not only in terms of the ages of mentors and mentees, but also where, how, and what types of technology-related problems and issues they deal with.

1.3 The Student Mentor Project at University of Hertfordshire's Business School

In 2007, Jenny Evans at the University of Hertfordshire's Business School first set up the Student Mentor Project, where the aim is that students help lecturers with blended learning technology-related problems on the local Managed Learning Environment, StudyNet. StudyNet is an institution-wide MLE that has been available since September 2001, and has grown in size and success in the last seven years. In the academic year 2006-2007 there were some 7 million logins to the MLE by students and staff. All students and academic staff have their own personalised portals and StudyNet has become an integral part of the University's commitment to providing a technology enhanced environment through the promotion of blended learning approaches.

The Student Mentor Project Manager, Jenny Evans commented on the typical issues raised by staff seeking a mentor since 2007 such as: MP3 recordings of lectures, tutorials, workshop activities and seminars, showing lecturers how to podcast lectures, digital audio visual recordings of lectures, tutorials, workshop activities and seminars, assisting with classroom technologies, using blogs and wikis, using and teaching html to develop teaching materials reached through StudyNet, image manipulation, developing quiz type formative assessment materials, entering reading lists from Word documents into the advanced reading list manager in StudyNet, developing programme StudyNet sites, as well as showing lecturers how to introduce animation into PowerPoint presentations. The main aims of the project are to use students who have the skills that staff don't have with all aspects of blended learning, and thus improve staff skills in educational technology. Students would basically teach staff how to do things, the skills transfer element, and also, students will suggest which packages work and which don't. The main outcome is to build the capacity, knowledge and skills of the staff being mentored, and of the student mentors, in the Faculty of Humanities, Law and Education.

With regards to choosing potential student mentors, Evans reported that, "the successful student mentors would have some technological content within their studies, but it was not a requirement, and although the general student body was also offered the opportunity to apply, first and second year students with these characteristics were given preference because their expertise will then be available in future years, making the project more sustainable". Once selected, student mentors additionally attended StudyNet training courses offered to staff, so their existing technical skills were further developed where necessary.

As the Student Mentor Project Manager, Jenny Evans was closely involved in communication and discussions between mentors and mentees to that make sure that mentees' demands or problems were viable and to learn whether or not the employed technologies could be more widely used. Lecturers who did experience problems with technology, and had issues with some of the points raised earlier e.g. wikis, contacted Evans who enquired with the mentors about their availability. In exchange, the students are paid for their time and in mentoring a lecturer, acquire transferable skills to add to their CVs. In the 2006-2007 academic year, 51 lecturers took advantage of this program, and in 2007-08, Evans reported that, "well over 100 staff have benefitted, whether it's been something short and sweet, or something bigger". Sally Bunce, Principal Lecturer, summed up her reverse mentoring experience by stating that, "It's not just a case of having my computer 'problems' sorted, but a learning experience for me" (reported by Attwood 2007). Thus, the project has been termed, "a win, win, win situation" by Evans:

> "The mentor wins by earning money, adding the work experience to their CV and showing their employability. The academic staff win by getting their technology problems solved and learning something new, and the University of Hertfordshire wins by the development of a better learning environment and the upskilling of its staff".

Because improving blended learning opportunities is a key objective of the University of Hertfordshire, and of its Blended Learning Unit, it is important for those who teach to be able to evaluate some of these technologies. It has been suggested that blended learning and its related opportunities, particularly Web 2.0 related technologies and applications, offer the potential for improved student learning even at ages as young as 11 (Crook & Harrison 2008: 4). Van Rosmalen (2008) has stated that with an increased reliance on technology and the use of Learning Environments, lecturers often have to do extra work beyond normal office and classroom hours, with developing new technology based learning materials, as well as making time for students. Barbour et al. (2004) noted that universities are spending an increased amount of money on technology, but not on staff development for these technologies per se.

2.0 Methodology

In order to assess some of the impacts from the student mentor project at UH, the Student Mentor Project Manager, Jenny Evans, and three lecturers (from more than a possible 100) who had used the student mentors were interviewed. These four interviews took place during November 2008. To get a perspective from the student mentors, a focus group was held with three of the 13 current student mentors. Three others participated in an email questionnaire.

3.0 Findings

3.1 What Makes a Good Student Mentor?

One of the requirements for the student mentors was that they had some sort of experience, or background in the technical aspects of technology and related StudyNet applications. This proved successful, as all of the lecturers mentioned that a mentor had to be technically good. Nicole Duplain (School of Inter-Disciplinary Studies) worked on a very technical project based around the re-designing of her StudyNet sites:

"...I told him (the student mentor) what I was trying to achieve, a vision of what it would look like, and he provided the technical framework and the amendments, so they need a technical background as well as they need to be users of StudyNet, and they need to have thought about what StudyNet tries to achieve so they need to have some critical analysis as well".

Evans reported similarly, "...mentors have to be technically good, but also being proactive and being organized is very, very important". Being proactive was another characteristic for a good mentor. For example, Karen Robins noted, "If you want a good student mentor, they should do more than just the face-to-face work", and this was supported by Duplain as well, who reported that, "A couple of times he said, "I am not sure how to do that, but I'll think about it", and when we met again, he had done it, in his own time, he did it straight away, and he is very happy to show me how things work, and he has a very good positive attitude".

This positive attitude came through in the focus group that was held with the mentors. When asked if they felt that lecturers should not be asking them to do repetitive tasks, one of them answered, "If I would be a lecturer, I would certainly like someone to do the typing up the information; they have so much more important things than data entry". The fact that lectures do have more important things to do than data entry was one reason why student mentors are used. Robins noted that, "you don't want to take endless amounts of time off your colleagues, and I was quite confident with a student I had talked to about Wikis. I would prefer to have some support with the nitty-gritty". Keith Seed added, "there were times when I forgot what I needed to do, and they would remind me, patiently, what to do, because I was like a student, and learning from them. They didn't waste time. Equally, they did things in an efficient way". He also added that a good student mentor is, "...someone who listens, is not bossy, someone who makes you feel at ease, doesn't make you feel stupid when you can't do something, gives you confidence. The mentors I dealt with could, in a sense be teachers, they could be real teachers because they had the right attitude".

Student mentors also had a say in why they think they are good student mentors. "I have had some sort of problems, where I have not had the solution straight away, there and then, but I've managed to find the information myself without actually asking anyone else. I go and find the information and get the job finished by the deadline; that is always my priority". Another student mentor said, "I think you have to be a confident person, not over-confident and brash, but you have to be able to go in and see a member of staff and not talk down to them, and not be patronizing, and take the lead, because that's what you're there for, to take the lead." A different student mentor added, "don't give up at the first hurdle, I guess it's thinking on your feet. Can I do it at home and email you, and it's having the confidence knowing that you can do that, that you're okay". It was also found that the best student mentors had had some previous work experience, if not with technology, than in another area with transferrable skills. When asked how they felt about being students who were teaching lecturers, they all agreed that they had no problems in the role reversal situation. One mentor said this was because, "I worked for four years before starting my degree, so I'm a bit older than the students generally are". The longest serving student mentor, who has been doing a great job since October 2006, said that she was a good mentor because of a feeling that comes after helping someone. Similarly, she added that student mentors are so good at the job because of their interest in it: "my interest in the job has never depleted over the years. I've maintained the same level of enthusiasm".

3.2 Benefits of The Student Mentor Project

3.2.1   Benefits For The Lecturers

One of the main benefits for the lecturers was that they had their 'problem' solved, but at the same time, none of their time was wasted. Robins said that mentors were very aware of how precious lecturers' time was, and that they did the job without wasting time and as efficiently as they knew how. In fact, student mentors noted that lecturers often felt guilty about taking up their time: "Sometimes I've noticed tutors are almost like apologising, "I'm sorry, am I taking too much of your time?," you know?, and it's like, that's my work". Evans also felt an immediate benefit from using the student mentors; instead of going on a day's course to learn about a program, she said, "there's about two things that I want to do and I can't find out how to, and I'm thinking "can I really spare two or three hours to go on a course to do two things?," and maybe I'd do better to get a mentor in myself. So, the program has been a huge time saver for lecturers".

Lecturers largely feel that they have learned new skills. Although in some cases the problems are too technical and the lecturer does feel that they need to know how to solve that problem in the future, most of the lecturers have learned new skills. For example, Duplain stated, "… he solved design issues…so I don't think I really tried to learn how to (do it) myself. I let him go on with it but I think he would have been totally capable to show me how he did it if I had wanted, but at the moment I haven't tried to do that". When asked if they could now solve some of the problems themselves, or run the application on their own, Robins said, "I did run (the wiki) myself last year…but I don't think I ran it as well as (the mentor)". Seed goes even further and stated that, "The (mentors) have taught me skills that I didn't have. I've gone a long way in limited areas, I do stress that. In terms of podcasting I probably know as much as anyone around here now, in other areas I would be back of the field". In other words, lecturers have now learned new skills and felt more comfortable running the application or doing the task themselves.

3.2.2   Benefits For The Student Mentors

Apart from the positive feelings that come after helping someone, student mentors also benefitted from the project in other ways. All student mentors agreed that the job they were doing was so much better than part-time work in a supermarket, and that it would stand out on their CVs. Student mentors got paid more than in any of their previous jobs, and the work was more flexible than a normal job, as they "can always fit a mentee around (my) studies". Students also noted that the student mentor project gave them an opportunity to develop their existing skills.

Each of the student mentors who participated in this case study said they had learned something new as a result of their work. One mentor said that the work he has done with Ms Duplain led to an improvement in use and navigation of StudyNet as well as HTML. Another student mentor noted that she had learned more about StudyNet, CSS and the classroom equipment and technology. The longest serving student mentor felt that over the two years that she has been involved, the skill she learned that she values the most was time management and learned how to balance her workload. Duplain added that her mentor had benefitted by learning to manage a real project:

> "He's basically carrying forward a small project but in its different steps. I asked him to prepare … StudyNet sort of survey of the users and he will be delivering this. So he will be basically carrying the project through to survey the users' point of view. I think it helps the mentors with communication skills because they obviously need to be able to advise the tutor when necessary, give their own opinion, make their own suggestions".

Another thing the mentors have learned is to solve problems they may not have encountered before; "…where we haven't been able to solve a problem in a session…we go away and resolve it … but you have to just not give up at the first hurdle…I think you have to be, I guess it's thinking on your feet, thinking okay I need to get around this problem, how can I do it?"'. How do they solve unknown problems? The overall consensus is that the students learn while doing: "I love technology, I mean I love all the gadgets, like technology when I'm here I love to just play around with stuff, that's how I learn, I play around with stuff". Another mentor mentioned that she is learning new things herself and playing around trying to figure out the problem rather than teaching the lecturer. However, Seed went so far as to say that, "the people (mentors) I dealt with in a sense could become teachers, proper teachers because they had the right attitude".

One of the most interesting benefits that student mentors received was respect. Not only did every single one of the lecturers have only positive things to say about them and their work, but one student mentor even noted how she was looked upon as 'different' now that she could help a lecturer.

"I think they respect me more… when I started this term, I helped to solve a problem with one of the modules that I'm studying at the moment, there was like a problem with the quiz and I emailed the lecturer and I said I'm a mentor, I can see like what the problem is and this is how you fix it and she was like oh that's great, that's really good to know and it's just, it does boost your confidence I think".

An increase in confidence was also a major benefit to the student mentors, because while they taught a lecturer how to do something, they were learning something new: "…certainly confidence, because I'm quite often using software that I'm not familiar with beforehand…and just noticing I can actually overcome problems and solve them by myself, it's, that's a huge benefit".

Finally, student mentors also felt that many of the skills they had learned while working with lecturers were transferrable. The longest serving mentor said, "I would like to pursue a career in IT consultancy and by being a mentor I will be able to draw upon my different experiences and use them to help me in my career". Another mentor said, "I would like to venture into the business consultancy which will entail me having to speak and instruct people of a higher authority than myself".

3.2.3   Benefits For The University of Hertfordshire

When asked how well the project had done overall, and where she thought the project was heading, Evans noted, "…in the scale it is at the moment I would see it continuing fairly indefinitely". In other words, the project has become sustainable; not only has it been successful since 2006, and is currently in its third year, Evans felt that it could and would continue. The project has also been transferrable; although it initially started in the Business School, mentors have since done work for lecturers in two other Schools for the project. Robins saw this as a very good thing for the University of Hertfordshire: "(the project is) really helpful because it makes them here more of the time and one of the problems I see with students is this balance of work come academic and if they're here more of the time and developing skills that will be useful to employment it's better than stacking shelves in a supermarket. It's a better skill to learn".

3.3 Problems Encountered With The Student Mentor Project

No project goes without some hiccups, and the biggest problems, or challenges, came from the point of view of the student mentors. One of the major problems associated with this project was communication, categorised in specific examples, such as communication between mentors and mentees, mentors and the Project manager, and the initial description of the problem. As an example of the latter, Evans noticed that, "staff are not always very clear how to define their problem and they're not very confident necessarily that they would understand the answer when it comes back". The longest serving of the student mentors felt that on some of her jobs, the lecturer should have done research into the problem first, and try to look for tutorials on the internet, before asking for a mentor's help.

One of the student mentors described problems with communication, stating, "(I) only had problems on my first job. I felt the tutor had no regard for my time, made no effort to ensure that we both knew what time I would be showing up…(the tutor) would take ages to respond to my emails and after I offered her a number of time slots, by the time she got back to me she had passed the work on to another mentor". Evans agreed, stating that "the mentors would complain that staff weren't responding, that they were contacting the staff trying to get a time and the staff weren't responding and then the staff would complain that the mentor hadn't been in contact with them". However, of the four lecturers who were interviewed, not one of them mentioned any such problems, so the challenge of communication may only have been encountered at the start of the project.

The second major problem that came out from the qualitative analysis of the data was that of the number of working hours. This lead to two major issues, that of the amount of work available to the mentors, and that of assessing how much work the mentors did on a project and how much they would get paid for their work if they went off and worked on it in their own time. One of the disadvantages according to all the student mentors was that it is unpredictable how much work they will have in a given period of time. The mentors in the focus group continued by saying, "I think I only remember seeing something like five jobs maximum last year (at any one time)". This would mean that there was not enough work to go around for all of the available student mentors.

From the lecturer's point of view, it was difficult to assess how much work mentors do. "I think the hardest thing for me was the managing of their time for payment, you know how do I assess how much time they've spent on a particular task because they would probably think about things outside the time they spent face to face …you had to trust them to a certain extent, to assess how long it's going to take," said Robins. Similarly, Evans noted, "…pay claims are a real problem, the mentors just don't fill them in, they don't get them in on time, and then they get de-motivated because they don't get paid!".

Another problem that was encountered was that of timing. "Staff want help primarily at certain times of the year, you would think it would be just before the start of the semester, but actually it's not, it tends to be early in the semester, and so it's happened quite a lot that the mentors have been all keen and ready to go and 'where's all the work?'…it was about December and staff were all too busy marking, whereas the students had got their coursework in, were waiting for it to come back and were raring to go. Then the staff would get the marking done and say oh well I think I'd like some help now but the students by then were almost into exams," said Evans. Student mentors agreed with that, and one of them noted that the biggest problems she ran into included liaising a convenient time to meet with a lecturer.

The only other problem that was mentioned was that of setting up the whole project when it first started in 2006. "It really did take … very long time to get things set up. We worked out that the quickest you can do it is twelve weeks. That's from the time you decide that you want to recruit mentors to the time they can do the work and the reason for that is time to advertise, time for them to apply, time to organise the interviews and let them know who's been successful, then they have to go through administration with Human Resources to get registered as members of staff," said Evans.

3.4 Solving The Problems

One of the first problems that were mentioned was that of communication. However, it was also mentioned that communication between mentors and mentees and mentors and Evans only existed in the infancy of the project. The second problem that was mentioned was the number of hours of work the mentors had. Mentors complained that "a few more hours would be nice," because "(this job alone) is not a sufficient source of income". So, what is the solution? "There's fifteen of us, which to me sounds, sounds quite, quite many to be honest. So, so I would think more like eight to ten". Another solution the student mentors came up with was to, "advertise more because it seems like tutors are not really aware of this… so maybe leaflets, personal messages etcetera… there (should be) a drive to inform staff that there is technology mentoring available, because that would probably give rise to more jobs".

The third problem was that of logging work and filling in pay claims, because students tended to forget or not take their papers with them. Evans noted that regular monthly reminders were sent out to student mentors, but that the problems still remain. With regards to timing, not much can be done about the fact that lecturers are busy at the start of a term when they are getting the course materials ready, and when they are grading course work, when mentors have very little to do (at the start of term and when their exams are finished). However, one student mentor did mention that a schedule should be published of times when the mentors are free and when lecturers might need them.

Finally, with regards to the last problem, that of setting up the project, Evans said, "I have managed to compact that a bit by planning ahead a bit more, rather than waiting for StudyNet training, by saying, "I'm going to have x number of mentors who are going to need training", even before I know who they are, and "so can you run a course around this time and can I book ten places?," and so long as you can assure them you've got a reasonable number on it to make it worthwhile".

3.5 Conclusion

The current research has shown how successful a mentoring project can be; it has also been shown that a typical, or 'traditional', mentoring project may no longer exist. There are many different forms and types of mentoring projects, and many different outcomes in terms of satisfaction and problems they encountered. This mentoring project took a different angle on mentoring, that of reverse mentoring, where a student helped a lecturer with a technology-related problem or issue. This mentoring project is in its third year, and the majority of problems and issues encountered by the mentors and the lecturers happened early on in the 2006-2007 academic year. Since then, the most prevalent problems, which were limited to communication between the mentors and their future mentees, have been resolved; both parties have become better at communicating with one another. The only other major problem is that mentors feel that they do not have enough work. One problem that never surfaced was that lecturers would have difficulty accepting the role reversal, and that shows how successful the project has been.

The success that this reverse mentoring project has seen is down to how good the student mentors are in their role as teachers, their teaching styles, their attitude to working with lecturers, and their appetite to complete the work, whether in the lecturer's presence, or elsewhere, finding a solution to a problem was always a priority. The lecturers should not be left out either; they were all able to look past the fact that they were being taught by a student, and in many cases, they learned more about the problem and picked up new skills in the process. In addition, the organisation and the administration of the project had nothing negative said about it; lecturers with

a problem would always be assigned a mentor, and in turn, the problem was solved. In other words, the work that took place stayed within the triad that makes up a University: its students, its lecturers, and the academic institution; the project has been successful it has been a win, win, win project.

4.0 Discussion

It has been shown that this student mentor project has proved to be very successful. The project lived up to all of the advantages that are accustomed with mentoring projects described above in 'Reverse Mentoring Examples' section 1.2. The student mentor project provided mentors and lecturers with IT training, where the latter case proved to be cost-effective. In addition to being cost-effective, the work the student mentors did was also a big time saver for lecturers. Lecturers often do not have the time to go on a course to learn more about a specific problem they might have, so students helped them instead. Furthermore, student mentors understood and appreciated the problems and the pressures lecturers face, and in doing so, became good teachers themselves, improved their communication and organisation skills, and student mentors learned to be more flexible by accommodating the lecturers' individual technological problems and availabilities. It also has to be mentioned that the best student mentors are hard-working, enthusiastic about their work, technologically inclined (to a certain extent), had previous work experience, and they are flexible and understanding.

The student mentors have also had an amazing work experience which has allowed them to work, get paid for the work, and learn at the same time. Lecturers have learned about new blended learning techniques and technologies, and the University of Hertfordshire as a whole has benefitted through the project's sustainability and transferability. Furthermore, feedback from both mentors and mentees was positive. However, things can always be improved. Duplain noted, "I (would like) to have a stand or drop-in sessions all year round on each campus for staff to come and use". Robins said that the work mentors do is akin to students who do a work placement as part of their course, and felt that they should all be compensated more for their work: "what I'd like to see out of this is perhaps how it would complement their degree in a recognisable way other than a CV". Interestingly, this was also brought up by some of the student mentors; one of them said that she would like to see the possibility of gaining some sort of qualification for the work she has done.

Evans initially had concerns as to whether lecturers would feel comfortable with a student teaching them. In fact, many of the problems that were mentioned under Section 1.1 'Peer Mentoring in Higher and Further Education' such as the quality of mentoring that the mentees receive, the time it takes to teach the mentee, the quality of the mentoring, and the selection of a mentor, have not applied to this mentoring project. It also helps that "the student mentors come from a variety of academic backgrounds, and I do not allocate them to a lecturer that they have a class with," said Evans. This means that the dynamism this 'partnership' creates is a positive one. The staff member has a problem that needs to be solved, and it is the mentor who solves it in a way that suits both the staff member and the students who will be using these resources (wikis, reading lists etc.). Thus, the fact that this student mentor project uses students who work with lecturers from a different academic discipline means that it transcends one of the problems that Fruchter and Lewis (2000) brought up, namely the one-sidedness of the solution, and the sustainability of the solution. Duplain described the reasons for the project's success best:

> "I think for me it's really a two way system where the mentor advises me on how to do things or he does things himself but it's a sort of teamwork. He has the technical skills I haven't got and I have the overall design idea and the vision of what the site should deliver. It's teamwork so I don't see that as a challenge. I think it's a benefit as it is a student (and) it brings in the student voice and experience in the project".

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