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**Paper for**

Higher Education, Skills and Work Based Learning

**Peer mentoring to secure student placements**

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# Peer mentoring to secure student placements

## Abstract

### Purpose

This paper describes a case study where student peer mentors were employed to motivate and assist undergraduates to secure optional professional placement positions.

### Design/methodology/approach

The paper describes the reasons for establishing the project and the recruitment of mentors. It outlines a survey of students who had not undertaken placements the previous year to try to identify the activities that would be most effective on the part of the mentors. It then describes the mentoring that was conducted. The mentors, together with the placement co-coordinator, devised support ranging from one to one mentoring, drop in 'clinics', online support through a social network and large group talks. It discusses the results of this work and evaluates the oral and written responses of both mentors and mentees.

### Findings

Those mentees who took part in the mentoring were typically those who were already enthusiastic about placement opportunities. The majority of students did not take advantage of mentoring support either face to face or online. It was found that the mentoring scheme did not significantly affect the proportion of students seeking or securing placements. However, the mentors themselves gained tremendous benefits from the mentoring scheme in particular developing their communication skills and confidence.

### Research limitations

A thorough survey of potential mentees was not carried out after the project to ascertain the reasons for their lack of engagement.

### Practical implications

There are two separate implications of this project: 1) The mentoring scheme was valuable primarily for the mentors and not the mentees and 2) The level of support provided by the University is not the main factor in the low take up of optional placement opportunities. If such learning opportunities are felt to be sufficiently valuable for the student learning experience they need to be compulsory with appropriate support available – a mentoring scheme might then be of far more value to mentees.

### Originality/value

There is very little published concerning the use of mentoring to facilitate work based learning. Furthermore most published work on mentoring is located in the 'best practice' school of pedagogical research where it is implicitly assumed that one must report on the success of an intervention. Frequently it is more valuable to examine more unexpected results of an intervention. This paper however shows much greater benefits achieved by the mentors than the mentees.

### Keywords:

Case study, mentor, work based learning, placement, social network

## **1) Introduction**

Many British Universities offer undergraduate students the opportunity to undertake a paid one year placement (or internship) within an organisation undertaking work relevant to their degree, between their second and final year of study. This opportunity is widely known as a 'sandwich' year. In common with other types of work based learning, the sandwich year confers significant advantages to the student involved. These include their future employability, their degree results, and more broadly the breadth of their University experience and discussed further in section 2.

For many years, students on undergraduate programmes within Salford Business School have had the option to choose between undertaking a three year degree, or a four year programme that includes such a placement. The student who goes on placement is allocated a supervisor and the placement year is assessed by means of reports, presentation and an assessment of performance in the workplace. This assessment contributes towards the degree classification as well being eligible for an external (City and Guilds) award. Over the 5 year period 2004-9, 92% of those completing a placement year within their degree graduated with a 2:1 or 1<sup>st</sup> class honours degree, in comparison to 53% of the general population. It is worth noting, however, that students with higher results tended to be those who secured placements.

However, the allocation of a student to a placement position is the decision of the employer alone since in most respects a placement differs very little from any other contract of employment. Thus placement positions are competitive and require tenacity on the part of the student in applying.

Support is provided to the student seeking a placement both within the Business School and by the University Careers Service. The support is fairly extensive and ranges from placement opportunities, talks by visiting employers, invitations to placement 'fairs', guidance on the application process including support for CV writing, applications, interview and employment tests. Support is provided face to face, by telephone and online.

Over previous years it had been found that the range of additional support provided had not substantially affected the proportion of students seeking placements or securing them. Despite the clear advantages of a placement to the student's future career, a small proportion takes up this option. Typically the proportion is around 10-12% in any given year, although in 2009-10 only 26 from 312 eligible students secured a placement i.e. just over 8%. Whilst the decline on the previous year (12%) was in large part due to the onset of the economic recession, nevertheless it was felt by those tutors involved that it was also attributable to a lack of motivation on the part of the students for an optional part of their course.

## **2) Value of placements**

The benefits of student placements are well established. Employers recognise the value of new temporary employees with fresh knowledge, skills and enthusiasm, typically at relatively modest salaries, who are potential future long term employees (Harris 2004). Universities and students have recognised many benefits of vocational learning and placements, with research showing students with placement experience substantially enhancing their employability (Neill and Mulholland 2003). This is particularly the case during difficult economic times (Lightfoot 2009). A number of studies have shown the benefits of placements to students (Mandilaras 2004, Rawlings et al 2005), especially the development of students' soft skills such as communication and team working skills (Neill and Mulholland 2003, Hordyk 2007). This has also been recognised in numerous policy documents, most notably in the UK in the Dearing Review (Dearing 1997) and the Leitch Report (Leitch 2006) which both stressed the value of vocational education. Furthermore, one year long placements, as described in this paper, allow for depth in the student experience which is not possible to achieve in short placements/internships.

Huw Morgan (2006) has however shown that students are often reluctant to undertake placements. His research suggests that the level of University support and specific concerns about the placements themselves are factors involved in this reluctance, both of which could potentially be addressed through engagement with peer mentors.

### **3) Mentoring of University students**

The efficacy of student peer mentoring is less well established. This is perhaps surprising, given the well established practice of employing students to conduct undergraduate teaching. Goldschmid and Goldschmid (1976) conducted a review of the practice of peer mentoring as developed in the 1970s and concluded that peer mentoring (or peer teaching as they preferred to call it) provided significant benefits for both parties:

“The evidence reviewed suggests that peer teaching, best used in conjunction with other teaching and learning methods, has great potential for both student ‘teacher’ and student ‘learner’, especially if one seeks to enhance active participation and develop skills in cooperation and social interaction”

They cited the work of Mackenzie (1976) who enunciated the significance of student peers known to all teachers:

“A student’s colleagues often represent the least recognized, least used and possibly the most important of all the resources available to him” (Mackenzie et al 1976).

More recently Allen et al (1999) report on the value of student mentoring, albeit primarily in relation to the socialization of new students. Second year MBA students were found to provide valuable support to first year students. Their work is widely cited as empirical support for the development of mentoring in higher education. Kane (2006) discusses the value of peer to peer mentoring for nursing students. There have also been a number of more recent publications discussing the value of social media for mentoring (e.g. Booth and Esposito 2011).

Other authors thus have tried to establish guidelines for effective mentoring. Fred Newton and Steven Ender in their book ‘Students helping students’ (second edition published in 2010) provide one of the most comprehensive texts on the development and effective practice of student peer mentors. Terrion and Leonard (2007) further review the literature to propose a taxonomy of characteristics of effective mentors.

Not all case studies on student peer mentoring report unequivocal success. Paglis et al (2006), reporting on doctoral peer mentors, found that students with greater incoming potential received more adviser mentoring, and that mentoring did not significantly contribute to important student outcomes.

### **4) The project**

Thus we established a project in the knowledge that a) the benefits of placements are well established, b) many of our students were reluctant to undertake the work necessary to secure a placement and c) student peer mentors could potentially provide the necessary motivation and support to significantly increase the proportion of students undertaking a placement.

In 2009 funding was secured from the Centre for Excellence in Professional Placement Learning (CEPPL) Innovation Fund. The purpose of the funding was to pay students completing their own placement in 2009, and thence entering the final year of their study, to act as mentors to students commencing their second year in 2009. The mentors would inspire, encourage and assist second year students to secure their own placements the following year 2010-11. They would provide support additional to that already available and described above.

All students completing their placement in the summer of 2009 were invited to apply for mentoring positions that included around 80 paid hours work over the forthcoming academic year. The method of application was a one page outline of their ideas as to how to establish an effective mentoring scheme. 11 students applied and all were recruited as mentors from September 2009 to may 2010. Prior to the start of the Semester they all undertook half a day of training from a professional mentor guide/coach. This covered the roles and responsibilities of mentor and mentee, the boundaries of appropriate support,

and identification and practice of skills required by an effective mentor. This was followed by a discussion with the project co-ordinator concerning the design and implementation of activities to achieve the project objectives taking into account the ideas suggested by mentors.

### **5) Why students did not undertake placements**

Prior to defining the exact nature of the mentoring activity, it was decided to try to identify the reasons students gave as to why they had not gone on placement. A questionnaire was designed by two of the mentors, together with the academic member of staff responsible for placements, and issued to final year students who had not undertaken a placement. This was conducted during their induction week in September 2009 and just prior to the start of their semester. 150 students completed the survey. It is thought that these responses were representative of the year group (286 in total): they were simply those who were present in the lecture theatres at the time the survey was undertaken. The following is a summary of the results of this survey:

76 students (51%) considered going on a placement year

51 students (34%) made applications for a placement: out of those who made an application 9 made between 1 and 2 applications, 24 made between 3 and 5 applications, 6 made between 6 and 10 applications and 12 made 11 or more applications

60 respondents (40%) did not attend any workshops or support sessions for students interested in undertaking a placement

In response to questions probing reasons for not applying/ not trying to secure a placement:

77 said they wanted to finish University as soon as possible

28 thought that the jobs available did not appeal to them/ weren't appropriate

21 did not want to relocate

8 did not feel they were capable of doing a full time job

9 felt they couldn't afford to do a placement

9 did not have time to apply

The following examples illustrate the range of reasons given in response to the open question 'Please discuss any reasons you had for not undertaking a placement':

Difficulties in finding a position

"I didn't get a placement despite applying for many vacancies"

"The recession"

Perceived lack of support

"The Uni does not do enough for students to secure a placement"

"Recommendation (i.e. by the University) is the best way of offering places to students in need of placements"

Education weariness

"It's good to get a placement but I wanted to finish Uni as soon as possible"

"I had already taken a gap year and didn't want to do another"

Not necessary

"My degree will be enough"

"I'm going to do a Masters"

"I already had full time and part time professional work experience"

"I am working with my family"

Personal reasons

“Regrettably I was too lazy”

“I didn’t have confidence and I felt I wouldn’t be successful”

“I applied for a placement but had to resit my second year”

“I felt a little old”

“I thought if I left Uni for a year and then came back it would be very hard to adapt again”

It can be seen from this short survey that two thirds of the students concerned did not make a single placement application and the majority of the student group were keen to just complete University as soon as possible, without the delay that a year on placement would entail. Many felt that they already had sufficient qualifications or experience to equip them after graduation, but interestingly quite a few felt they didn’t have the time or confidence to secure a placement position. Some had the impression that they would be given a placement in much the same way as work experience had been organised when they were at school. Only a small proportion of those who had been unsuccessful in securing a placement (twelve out of the sample of 150) had made more than ten applications.

## **6) Mentor activities**

A meeting was held directly after this to organise activities that would address issues raised in the survey. It was agreed that initially the most important objective was to motivate second year students to apply for placements, take advantage of support that was provided, and make good quality applications. Mentors went to speak to all students within their lectures to relate their own experiences and offer mentoring help. This help was provided in the following ways:

- Two mentors were available every weekday lunchtime for two hours for the entire semester sitting at a desk in a very busy part of the School to answer any questions that students or help that they needed on a casual drop-in basis
- A Facebook group was established and widely advertised for any students to join and discuss online any concerns they had or help they needed. Staff were initially reluctant to join this lest their presence inhibited the discussion but mentors felt that they should participate.
- Mentors attended weekly workshops listed on all student timetables and run by the placement co-ordinator. Students could discuss any issues with the mentors before, during or after each workshop.

At the end of the first semester (December 2009) a meeting was held between all the mentors and the placement co-ordinator to assess the value of the activities conducted thus far. The mentors reported that they had had very little response to the lunchtime drop-in sessions and on many occasions no-one talked to them at all. Some students had asked mentors if they could write applications for them or find jobs for them which was felt to be inappropriate. The Facebook group did have 29 members after two months, but this included the 11 mentors and three staff and there was very little communication taking place: typically less than one posting per day. The workshops had been very busy early in the semester but towards the end attendance had tailed off and students attending were more interested in speaking to the placement co-ordinator than the mentors.

Thus it was clear that a change of activity was needed, and the mentors felt that the most effective support that they could provide was if they were each allocated a group of students to mentor on a one to one basis. Thus at the beginning of Semester 2 (January 2010) the mentors and placement co-ordinator visited and spoke at all the lectures for second year students asking that any students who were interested in undertaking a placement and being contacted by/ meeting a mentor on a one to one basis should leave their email addresses. 145 students responded positively, which was felt to be an excellent response, and these were divided between the mentors i.e. approximately 13 each. Where possible the mentee was allocated to a mentor on the same programme of study. It was agreed that every mentor would seek to meet with their mentee within the space of two weeks. It was agreed that these meetings should only be held in public locations e.g. the student canteen, and that mentors should be careful not to give out personal details. In practice in some cases phone numbers were exchanged. Lunchtime drop in sessions were reduced to just two per week and mentors continued to attend weekly workshops.

A meeting was held four weeks later to evaluate the results of this new activity. All 145 students who had expressed their interest had been contacted by email to suggest a face to face meeting. Less than one third (41) had replied; i.e. 104 students who had expressed their interest had failed to reply to an email, and in most cases a second reminder email; this surprised the mentors. Of these 28 had held meetings with their allocated mentors, in 4 cases on more than one occasion. Those mentors who had held face to face meetings felt they had been very productive with advice being given to students at various stages of the application process (e.g. help with application forms/ psychometric tests/ telephone and face to face interviews/ assessment days), and in some cases just discussion about personal issues such as lack of confidence. Students 'dropping in' to see mentors on the lunch time sessions slowed from a trickle to nothing and these were cancelled midway through the semester and little assistance was required from mentors in workshops.

The mentoring scheme ended as planned in April 2010 and was followed by evaluation with all stakeholders.

## **7) Results and feedback**

From a cohort of 330 students 36 secured one year placements in 2010. Whilst this was significantly higher than the previous year (when 26 students secured placements), it was from a larger cohort size and there were more vacancies as the economic recession eased slightly. The total securing placements was in fact less than in 2008 so the increase from 2009 to 2010 could not validly be attributed to the mentoring scheme.

### **Mentee feedback**

At the end of the second semester all mentees, i.e. all second year students, were interviewed to one of two focus groups to evaluate the efficacy of the project. Seven students attended these discussions, all of whom had either secured a placement or were at an advanced stage of the application process. Thus their views cannot be seen as being representative of the whole cohort. It is not possible to say whether or not they would have been successful without the support of mentors, but they had demonstrated their enthusiasm for placements throughout the year. All seven had received help including face to face meetings with mentors and felt that the mentors had been really helpful in their efforts to secure a placement. They referred to specific help they had received such as looking at their CVs, looking at their online applications, suggesting where they should apply and practical advice concerning employer assessment centres. They commented favourably on the accessibility of the mentors. A number of them referred to the importance of motivation:

"Motivation is the main benefit students got from mentors ... after getting a rejection you get scared and give up easily. The mentors encouraged us to talk about it and try again", and

"We could come along and share our experiences and ask mentors any questions at all – they'd been through it themselves", and

"The mentors gave us confidence in our applications and that we could actually do the job".

They were also asked about their opinion about the lack of take up of the placement group on Facebook. One response to this seemed to be representative of the group's opinion: "Facebook is where we go for our social life, it's not where we want to go to get help about placements – we'd sooner see you (i.e. staff) for that".

### **Mentor feedback**

All mentors completed both a written and oral evaluation of the project and their role within it. Further feedback from the mentors is available at:

[http://www.youtube.com/watch?v=dSKhQp2RO2o&feature=player\\_embedded#at=107](http://www.youtube.com/watch?v=dSKhQp2RO2o&feature=player_embedded#at=107)

Mentors were without exception very positive about their experience.



In response to the question 'Have you enjoyed your work as a mentor?' all eleven responded positively: "great opportunity", "great satisfaction", "exciting experience", "very fulfilling", were some of the comments.

In terms of the benefits to themselves they were very positive. Their comments included: "helped improve my time management, counselling and decision making skills", "improved my communication skills", "gained confidence in my own applications", "I have learnt about using tact and diplomacy when highlighting the strengths and weaknesses of others", "I have improved organisational skills", "developed one on one skills which will be important throughout my career", "I have gained people skills learning how to listen and behave with other people", and "I've gained experience in team working, leadership and motivational skills".

The mentors did feel that they had helped students with many practical issues from writing letters to confidence and conduct in interviews. In some cases they said that the more informal support they could provide was particularly useful, and that they could show through their own experience the benefits of placements. They felt that both mentors and mentees would gain lasting benefits from the experience, for example after graduation.

Mentors were critical of other students in some cases: "some mentees want everything on a plate i.e. do not want to help themselves" and "the problem lies with the willingness of students to engage and ask for help" and "students don't respond". In more than one case mentors commented that it seemed to be the most able and motivated students who sought their assistance: "sometimes you think you're just helping the ones who're going to get placements anyway" and "two students who I saw a few times were already very confident and just needed some suggestions at the final stages of interviews". A few of the mentors stressed the importance of interaction with students throughout the placement process with the onus being on the student to take advantage of opportunities available. One mentor went further saying that "it is important when allocating mentors to distinguish between those that are truly committed and interested and those that want it all done for them". The implication of this comment was that mentoring should only be provided for students prepared to undertake the hard work of applications themselves.

Mentors also made a number of constructive suggestions as to future use of mentors. In particular they felt it was important to allocate mentors to mentees at the very outset with defined meeting points and times that fitted within student timetables:

"I think the idea of splitting students to each mentor is really good – it is clearly the most productive way" and "Mentoring should be more organised and a computer room booked for every week", "an organised session between mentors and students needs to be organised every week with both sides agreeing on their objectives" and "these need to be promoted with influential presentations, rather than informative ones". Some felt that mentors should have specialist roles, such as assistance with different stages of the application process. Some suggested use of additional communication channels such as using text messages to establish initial appointments.

The development of the mentors themselves was the most rewarding part of the entire project. Many staff commented on their maturity, agility and all round communication skills. They were of course a self selecting confident group in the first place but it was no surprise to see many of them secure prizes such as 'Best final year student' at their graduation. Without exception they have all gone on to good graduate positions or postgraduate study.

### **Staff feedback**

It was clear that in a well organised system mentors could provide additional support to full time staff, as a result of their availability and in some cases because they had greater empathy and rapport with the students concerned. However, frequently students preferred to see the member of staff concerned due to their greater experience and/or influence. The work of the mentors was excellent and they grew in maturity and knowledge as the year progressed. They were reliable, professional and innovative. If there was anything to fault at all it was that the mentors expected other students to share their enthusiasm.

However, the staff involved were disappointed that the mentor scheme did not have a greater impact, despite the range of support offered. The lack of voluntary take up of the mentoring reinforced the experience that incentives and support do not make a substantial difference to the proportion of students securing optional placements. It strengthened the staff opinion that the majority of students would only take work based learning seriously, and thus persevere with applying for and securing placements, when it was a compulsory part of their programme. This has subsequently led to significant programme amendments so that for many programmes the placement year is now a compulsory part of the degree as in many other institutions

## **8) Conclusions**

This paper has described and evaluated a scheme to employ student peer mentors to assist undergraduates in securing placement positions. Students with placement experience were recruited to design and implement appropriate mentoring activities, taking into account the reasons students gave in a survey concerning their problems and reluctance in relation to placements.

The scheme had mixed results with limited evidence of increased enthusiasm for work based learning or greater take up of placements. Whilst some students did seek assistance from peer mentors, at times (for example during drop in sessions) the mentors had little or no mentoring to do, and when students needed help they wanted to see academic staff instead. There is significant contemporary interest in the use of social media for mentoring, but in this project the Facebook group established by student peers to facilitate/encourage placements had very little take up. Some students felt that their use of Facebook and their placement applications should be kept separate. In common with the work of Paglis (2006) we did find that overall those who used the help of mentors the most were students with the greatest incoming potential.

It was felt by the mentors that some improvement could be made to the future organisation of a peer mentoring scheme to encourage and develop students seeking professional experience. In particular it was suggested that the mentoring scheme needed to commence with a range of inspirational communication followed by the allocation of one to one mentoring in appropriate rooms scheduled within the timetable.

However, overall the lack of impact of the project amongst the mentees was not a result of poor organisation, training or activity on the part of the mentors, but mainly attributable to the lack of enthusiasm for optional work based learning/ placements on the part of undergraduates. Symptomatic of that lack of enthusiasm was the large number who did not reply to mentor email despite indicating their interest orally in lectures. This paper does not attempt to analyse this lack of enthusiasm which is a valid subject for future research.

The project did have a substantial positive impact on the mentors. Unanimously they expressed the widespread benefits they felt that both they and mentees had achieved. All had clearly developed their range of skills substantially and were very well equipped for future careers. This was commented on by many staff. As in any teaching and learning context, it is frequently the teachers who learn the most.

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## **References**

Allen TD, McManus SE, Russell JEA (1999) "Newcomer socialization and stress: Formal peer relationships as a source of support" *Journal of Vocational Behavior* Volume 54(3), pp 453-470  
Booth M, Esposito A (2011) "Mentoring 2.0 High tech/high touch approaches to foster student support and development in higher education" Edited by: Wankel LA, Wankel C *Cutting-edge Technologies in Higher Education* Volume 2 Emerald pp 85-103

- Dearing R (1997) "The National Committee of Enquiry into Higher Education" available at <https://bei.leeds.ac.uk/Partners/NCIHE/> (accessed 10/5/2011)
- Goldschmid B and Goldschmid L (1976) "Peer Teaching in Higher Education: a Review" *Higher Education* Volume 5 pp 9-33
- Harris KJ, Zhao J (2004) "Industry internships: feedback from participating faculty and industry executives" *International Journal of Contemporary Hospitality Management*, Volume 16(7) pp 429 – 435
- Hordyk V (2007), "A convergence of perspectives: enhancing students' employability" in E. O'Doherty *Education in a Changing Environment, Proceedings of the fourth conference*, [www.ece.salford.ac.uk](http://www.ece.salford.ac.uk) (accessed 10/5/2011)
- Kane A. (2006) "Peer-to-peer mentoring by nursing students" *Nursing Times* 30/11/2006 <http://www.nursingtimes.net/nursing-practice-clinical-research/peer-to-peer-mentoring-by-nursing-students/207779.article> (accessed 10/5/2011)
- Leitch Review of Skills (2006) "Prosperity for all in the global economy - world class skills – Final report" HM Treasury available at <http://www.official-documents.gov.uk/document/other/0118404792/0118404792.pdf> (accessed 10/5/2011)
- Lightfoot L (2009) "Graduate jobs crunch calls for experience" *The Times* 18/01/09
- Mackenzie N, Evans M, Jones AC (1976) *Teaching and Learning – an Introduction to New Methods and Resources in Higher Education* Unesco International Association of Universities Paris 2e
- Mandilaras, A. (2004) "Industrial Placement and Degree Performance: evidence from a British Higher Institution" *International Review of Economics Education* 3(1), pp 39-51
- Morgan H. (2007) "Why Students Avoid Placements" in E. O'Doherty *Education in a Changing Environment, Proceedings of the Fourth conference*, [www.ece.salford.ac.uk](http://www.ece.salford.ac.uk) (accessed 10/5/2011)
- Neill, N. and Mulholland, G. (2003), "Student placement - structure, skills and e-support" *Education and Training*, 45(2) pp 89-99.
- Newton FB Ender SC (2010) *Students helping students – a guide for peer educators on College campuses* Wiley, San Fransisco, 2e
- Paglis LL, Green SG & N. Bauer TN "Does adviser mentoring add value? A longitudinal study of mentoring and doctoral student outcomes" *Research in Higher Education* Volume 47 (4), pp 451-476
- Rawlings, P., White, P. & Stephens, R. (2005) "Practice-Based Learning in Information Systems: the Advantages for Students" *Journal of Information Systems Education* 16(4), pp 455-63
- Terrion JL, Leonard D (2007) "A Taxonomy of the Characteristics of Student Peer Mentors in Higher Education: Findings from a Literature Review" *Mentoring & Tutoring: Partnership in Learning*, Volume 15(2) pp 149-164