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FACILITATING THE IMPACT OF GRADUATES ON STUDENT EMPLOYABILITY

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ABSTRACT

This paper presents an initiative to engage with graduates to facilitate the improvement of the current students' employability at the Faculty of Computing, London Metropolitan University. Outcomes from this initiative have shown that it is an effective way to increase student awareness of employability, to develop 'professional skills' and to fill the gap between industry and academic study.

Keywords

Employability, graduate impact, student enterprise, professional skills

1. INTRODUCTION

Recent graduate employment research carried out by High Fliers Research (2011) concluded that the number of vacancies at so-called "IT companies" is small and yet the volume of graduates needed to work in IT functions at a wide range of employers in other industries and business sectors is considerable. Furthermore, three-fifths of employers stated that it was either "not very likely" or "not at all likely" that a graduate who'd had no previous work experience – either with their organisation or at another employer – would be successful. This is in the context in which students will be asked to pay more fees for their higher education. It is not a surprise to see that employability is becoming a high priority that HE institutions will have to address. Statistically, computing graduates at London Metropolitan University have a low awareness of employability. This is reflected in the low number of students taking on the work placement module and a lower employment rate compared to other Higher Education Institution (HEI) competitors (Unistats, 2010). This paper presents a model that the Faculty of Computing, London Metropolitan University is using to address the challenge and improve students' employability.

2. THE IT INDUSTRY CHALLENGE TO HE

Parr et all (2011) quoted the e-skills uk Technology Insights 2011 reports that there are approximately 144,000 work places in the UK's IT & Telecoms industry – 87% of which are IT and 13% Telecoms and that, despite the state of the UK economy, demand for IT & Telecoms professionals has risen in the quarters up to and including the second quarter of 2010. At this time there were over 90,000 advertised positions in the UK (e-skills UK, 2011). Despite a highly IT literate population (relative to other countries) the education and learning sector has failed to deliver enough candidates with the necessary technical skills that they can apply in the workplace. Parr et al (2011) proposed two ways to meet these challenges from the industry. One is to specify an HE benchmark for Information Technology that HE may aim at. Another way is to engage with the employers to provide appropriate CPD that would ensure that graduates could enhance their 'academic' skills with the necessary work-based skills for the benefit of both themselves and their employer. These are both good proposals, it remains to be proven that they will indeed improve students' employabiitiy.

3. OUR RESPONSE TO THE CHALLENGE

Our solution to this challenge is a model that involves our graduates (sometimes termed alumni). Graduates are great assets for universities. How can we use them to help to improve the current students' employability?

Harvey et al stated that employability is at the heart of the process of learning (Harvey, Locke and Morey, 200), and Yorke defines employability as a "set of skills, knowledge and personal attributes that make an individual more likely to secure and be successful in their chosen occupation(s) to the benefit of themselves, the workforce, the community and the economy" (Yorke, 2006, page 8). Graduates have gone through the education process at the university and also are being tested in the real working environment on their skills, knowledge and personal attributes that make them succeed or fail in their workplace. The continuous process of learning never stops; the employability attribute in graduates continues developing throughout their life after graduation.

The skills gap discussed in the 2007 report from the British Chambers of Commerce (Potter, 2007) appears not to have abated. Computing curricula have evolved to address the skills requirements set by employers, i.e. aptitude for communication and teamwork. However, employers continue to seek and expect other graduate attributes such as confidence and a positive attitude over both degree subject and result (Demos 2010). Extra-curricula activities, such as those described below, can prove to be more successful with the student body than a module devoted to professional skills as part of an under or post graduate programme of studies.

What would happen if the graduates who are already in the workplace meet the current students who are still in the middle of their academic study? Would the contributions from graduates help or hinder or make no difference to either one's employability? We carried out a number of initiatives that involve graduates.

The impact that graduates are able to make to current students is invaluable. However, in addition the graduates themselves gain many tangible and intangible benefits by continuing their association with the institution. The figure below depicts this cycle of association (Figure 1).
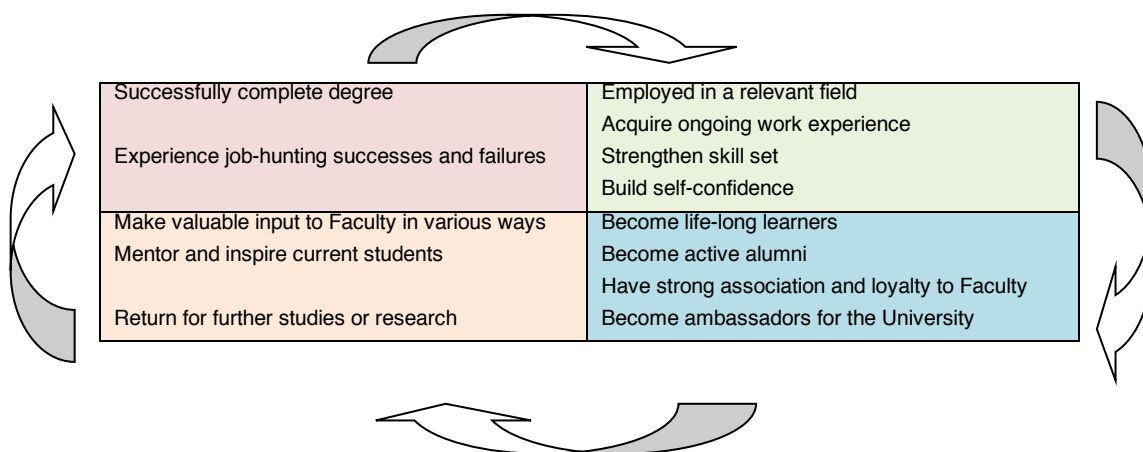

Successfully complete degree	Employed in a relevant field
	Acquire ongoing work experience
Experience job-hunting successes and failures	Strengthen skill set
	Build self-confidence
Make valuable input to Faculty in various ways	Become life-long learners
Mentor and inspire current students	Become active alumni
	Have strong association and loyalty to Faculty
Return for further studies or research	Become ambassadors for the University

Fig. 1.   The cycle of association between current students and graduates

3.1 Student Enterprise Workshops

The Faculty of Computing of London Metropolitan University launched the monthly Student Enterprise Workshop (SEW) series in October 2009 (Jing, Chalk, and Siva, 2011) aiming to improve student employability awareness. The Student Enterprise Workshops (SEWs) are organized once a month on a weekday after 5pm, this is to allow maximum student attendance and allow external speakers, industrial contacts and alumni to attend after work. The workshops are aimed at raising student awareness of the world of work and industry under carefully designed themes and through invited guest speakers, namely industrial partners, alumni and representatives from various businesses and organisations. The main purpose of the SEWs is to improve students' employability through direct interaction with industry professionals. One of the key participants are graduates who may give talks to share their good practices in the industry or just attend the workshop to continue their professional development. Either activity can add value to their professional portfolios and, in some cases (eg the BCS) 'score points' towards professional qualifications.

The workshop sessions are set up to be highly interactive with speakers discussing, disseminating and sharing their experiences and expertise. So far, nine carefully selected graduates have given talks in the workshops. We use the attendance of the workshop as a key performance indicator. The workshops are voluntary, students don't have to attend, but if they do, that is an indication that students are actively seeking new knowledge and improvements. The following diagram shows the attendance from the six SEWs that graduates contributed to.
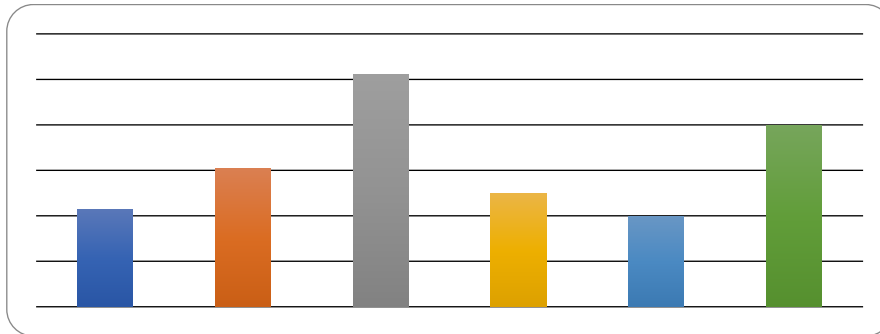

Fig. 2.   The number of students attending the SEWs that involved speakers from the graduate community

Another performance indicator is the feedback gathered from students attending the workshops. The students appear to value the content of the professional graduates' presentations, which they find to be technically current. The students also appreciate the wealth of information that is provided in the workshops. Another performance indicator is the feedback we got from students on their employability. Here are a few comments from the students.

> "I am glad that I came to this workshop because I feel it is really important to hear what the professional (graduates) had to say".
>
> "I personally thought that this session was really good, it provided me with important information, for what to do in the future. It was really useful, thank you"
>
> "A huge brainstorm of information to take on and treasure for the rest of my life"
>
> "The workshop is interesting and gives opportunities to know all about employability"

Finally, we use the sharp increase in enrolment of the optional placement module as an indication of students' heightened awareness of employability.
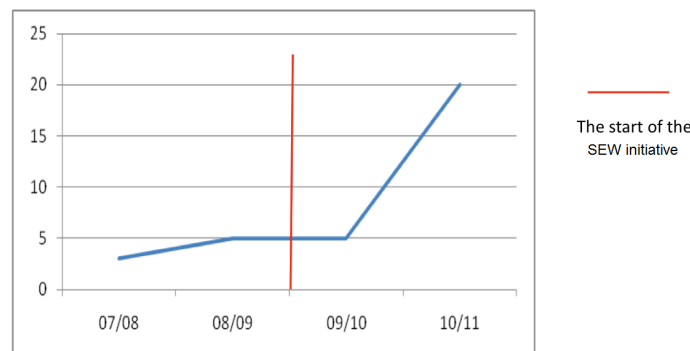

Fig. 3.   The number of students on the work placement module each academic year from 07/08 to 10/11

3.2 The Graduates' Contributions Towards Curriculum Development

This is our view that graduates know the course well, course leaders keep in touch with graduates, and get feedback on the skills/knowledge they learn from the course that are used in their workplace. Areas that need improvements will be discussed and act upon when it is possible. As a result of this initiative, at least three MSc courses have been modified and the content of four modules has been changed to reflect the feedback.

Cranmer (2006) concludes that 'increasing employment-based training and experience, and/or employer involvement' could be a better use of resources than classroom-based initiatives'. Employer involvement and employability awareness are at the heart of our initiatives. Many graduates are very keen to help the faculty to provide such employment-based training and experience. Where it is appropriate and in line with module learning outcomes, guest lectures given by graduates are organized by module leaders to bring more industry and practical aspects to the curriculum. Excellent feedback has been obtained from students so far.

3.3 Graduate Mentoring Current students on knowledge transfer projects

The World of Work (WoW) agency is a Faculty of Computing initiative to provide commercial project exposure for top performing students in the faculty, hence improving their employability. The WoW agency has undertaken some projects that are difficult to cope with technically by the current students. This is where graduates come in, as mentors for these students. We have trailed this initiative in an iPhone app development project which involves a current student, but mentored by a carefully selected graduate. The project has successfully been competed in December 2010. Alan Stuart, Project Manager of the WoW Agency, emphasises "the key requirement by business and industry for graduates or students with a high level of employability skills and proven project experience. Mentoring from carefully selected graduates catalyse the employability improvement process" (personal communication, December 2010). We are currently investigating ways in which graduates may be able to support students for dissertations. This appears to be an area where graduates are willing to participate [Conway and Cleverly, 2010].

3.4 Motivation from the Graduates

Students need motivation, and there is no greater motivation than seeing someone doing the same course with a similar skill set go on and do well in the industry. We encourage good graduate case studies and share them with our students. We organize it in a number of ways. One way is to invite graduates to share their achievements, showcase the products/work they have developed. Another way is to publish a monthly Student Newsletter called LINK. This is a way for us to distribute good news, good case studies with students and make them aware of the importance of the employability agenda and how to improve their skill portfolio.

3.5 Benefits for the Graduates

In an apprenticeship theory model (Lave and Wenger, 1991), the graduate may be considered an apprentice at an advanced stage, the undergraduate an apprentice at an early stage. Both belong to an extended community of practice in our model. The graduate may assist in the apprenticeship learning of the UG. The process of crossing and recrossing boundaries between the workplace and other sites for learning provides, in itself, a stimulus for learning (Engeström et al., 1995). Fuller (2006) argues that the opportunity to combine participation in contrasting communities of practice (in the workplace and educational settings) appeals to many adults, and deserves to be taken more seriously by agencies (at national and European levels) which aim to increase people's involvement in formal educational opportunities. Lave and Wenger (1991) help explain why increasing numbers of adults, from various backgrounds, are seeking new ways (such as combining work and higher level learning) to respond to the uncertainties and opportunities characteristic of contemporary life.

We invite our graduates to use the faculty as their knowledge base. It is one of the strengths of the university of having to have knowledge and expertise in a variety of areas, which are now made available for graduates to access. Graduates can continue accessing the university's facilities after graduates (as alumni). We

support our graduates in a number of ways to enhance their careers and to support the improvement of their own employability. They are encouraged to continue their study to higher levels such as MSc and PhD programme. We recognize that many graduates may only have a very small window of time to gain some new knowledge, we offer them a suite of CPD course to fill in the skill gap that they need for their career. The faculty of computing currently offers Cisco, Oracle and Adobe CPD courses at a very competitive price for the graduates with more CPD courses planned in the pipeline. We also invite graduates to seminars and workshops such as the Student Enterprise Workshops where they can interact with academics and speakers from the industry, exchange ideas and consult.

Graduates do get jobs from university directly or indirectly. The faculty has obtained five KTP projects in the past 2-3 years; all five KTP associates employed for these projects are graduates from the faculty. The career services at the university will continue support the graduate for up to 2 years after the graduation, their services including advice on CV and covering letter, interview techniques, job hunting tips and providing a list of job opportunities on their Website.

4. CONCLUSION

These graduate employability initiatives have been on going for over 2 years now with a greater emphasis on employer engagement to increase job opportunities for students in the faculty. This is supported by a newly appointed faculty employer engagement officer, who can help the process of networking current students with former students. Further improvements include a new "build your career" website for students to explore and seek advice. More graduates have been encouraged to attend and present in the workshops and share their experiences. More emphasis will be put on the key issues, techniques and approaches involved in job applications and interviews. Finally, there is greater involvement of university career services, potential work placement providers and employers.

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