Student and staff perceptions of a Vacation Research Assistantship Scheme

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There is a push for universities to equip graduates with desirable employability skills and 'hands-on' experience. This article explores the perceptions of students and staff experiences of a research assistantship scheme. Nine students from the University of Worcester were given the opportunity to work as a student vacation researcher for up to 10 weeks. This opportunity gave 'hands-on' experience to students to understand real world research, thereby enabling the development of academic and research skills and increasing a student's employability. The scheme received positive feedback from both students and academic staff and was recommended as a means to enhance student's future employment.

Keywords: Employability; research assistantship scheme; vacation research assistant; students.

MPLOYABILITY is high on the government agenda (Moores & Reddy, 2011), with higher education, and the skilled work force that it produces, being increasingly seen as essential for maintaining the international economic standing of the UK (Atkins, 1999; Knight & Yorke, 2003; Saunders & Machell, 2000). However, it has been suggested by employers that there is a 'skills gap' at the graduate/employer interface that needs to be addressed (Gammie et al., 2002; Hesketh, 2000). This, along with the report that current graduates are more likely to work in lower skilled jobs than 10 years ago (Office for National Statistics, 2012) has lead to a push for universities to equip graduates with desirable employability skills and 'hands-on' experience. Indeed studies have indicated the need for universities to make efforts to develop the transferable skills considered essential in many high level employment opportunities more explicit (Confederation of British Industry [CBI], 1999).

Results from the National Student Survey (Higher Education Academy [HEA], 2012) suggest that despite the good work from many institutions there is still room for improvement surrounding graduate employability. The Quality Assurance Agency (QAA) psychology benchmark statement emphasises that studying a psychology degree is

excellent preparation for many careers not limited to professional training in specific area of the discipline. As well as subject specific skills a psychology degree also provides a student with: communication, numeracy, teamwork, problem solving, critical thinking, and other skills which are valued by employers (QAA, 2010). However, students are not always aware of these skills and how best to articulate these attributes, or give examples of academic and other activities as evidence of having acquired such competencies. Furthermore, many overseas academics believe that graduates leave university with a lack of soft skills essential for success in the working world (Kamal, 2006; Singh & Singh, 2008). It has been suggested that the graduate unemployment rate will continue to increase unless universities and graduates alike are prepared to sharpen their soft skills (Omar et al., 2012).

Giving students the opportunity to gain 'hands-on' experience may be one way to help students develop these skills and help increase employability, for instance a work placement scheme (Knight & Yorke, 2004). These provide opportunities for students to participate in current research activities, contributing to the creation of a student's knowledge and strengthening the link between teaching and research. Evidence in

the UK suggests that this type of work experience has multiple benefits to students in terms of employability, personal development (Moores & Reddy, 2011), enhancing learning, and boosting the research culture (Tweed & Boast, 2011). Furthermore, it assists in developing the skills essential for completion of assignments and researchrelated dissertations, and enables students to be reflective within their learning, achievements and experiences, which again facilitates the progress of their own personal and professional development (Smith et al., 2007), and provides the student with valuable research training. For instance, Russell, Hancock and McCullough (2007) examined the benefits to 3300 students who participated in research experience opportunity programmes in the US. It was found that such programmes increase confidence, understanding and awareness, with 88 per cent of students reporting that their understanding of how to conduct a research project had improved significantly, and 83 per cent saying that their confidence in their research skills had increased.

These experiences have taught students to apply their academic skills within a professional setting, thus enhancing employability. As well as this these 'learning by doing' schemes can also increase a student's intention of continuing their education. For instance, Lopatto (2004) evaluated 1135 students from 41 institutions in the US noting that 91 per cent of students who participated in undergraduate research opportunity programmes either sustained or increased their interest in postgraduate study, including 3.5 per cent (N=51) of students reconsidering further study after previously reporting no intention of continuing education. Similarly, Hunter, Larsen and Seymour (2007) have indicated that students in the US who have participated within a research placement tend to display more interest in continuing a career within research. Furthermore, Willis, Krueger and Kendrick (2013) evaluated a programme aimed at providing research experience to

students over three summers in the US. Overall a total of 29 students' perceptions of the scheme were evaluated, finding that the experience had helped them to make a more educational decision about pursuing other postgraduate study.

Therefore, there is a growing need for university departments to encourage these types of schemes to help equip students for occupational life after their studies as well as give them valuable skills in their university career. This article aimed to explore perceptions of both students and staff involved in a research assistantship scheme at the University of Worcester.

Overview of the scheme

The University of Worcester set up a scheme which aimed to provide:

- Undergraduates and recent graduates with 'hands-on' experience of working on a research project over the summer vacation, enabling them to gain insight into a research career, as well as enhancing their CV;
- An opportunity for a student to take part in a research project that was unfunded and would not have been done without the student's involvement:
- Opportunity for students to take the project forward with the support and experience of academic members of staff.

The university wide scheme was aimed at:

- Students undertaking an undergraduate degree (or equivalent) at the University of Worcester and who were predicted to obtain a 1st or 2:1:
- Students who had achieved a 1st or 2:1 and who were about to commence, or were in the early stages of postgraduate studies at the University of Worcester.

Postgraduate students were included in order to explore the benefits of the scheme for these students.

Method

Procedure

Staff at the University of Worcester were invited to submit proposals for a vacation

research assistantship and were asked to provide details of a project proposal; a job description; an account of the benefits for the student; outline any ethical issues which related to the project and how they would be addressed; and a CV. Sixteen applications were received from staff, which were considered by a panel and a total of nine of these were then funded. Vacancies of the accepted proposals were then advertised on the vacancies section of the website and were promoted to students via an all-user email and on the student online learning environment (SOLE) web page. One-hundred-andsixty-three student applications received, and 52 candidate's applications were then shortlisted and invited to an interview, where nine were selected as vacation research assistants. The personnel department at the university organised a mini induction for the nine students, similar to that of a corporate induction. Students then worked on the projects with staff supervision for four to 10 weeks.

Participants

Nine students from the University of Worcester were appointed as vacation research assistants from a total of 52 students that were shortlisted and 163 students who applied. The majority of successful candidates were aged between 20 and 24 of which six were female. The scheme was most popular among second-year students (40 per cent) and psychology students (37 per cent), which was expected due to the emphasis that is put on research in this department in teaching. The level of the students was evenly split with two first years; three second years; two third years and two postgraduates. The two first year students were completing degrees in Psychology and English language and English literature. The second-year students were completing degrees in: Psychology; Computer Games and Multimedia Development; and History. The two third year students were completing degrees in: Human and Animal Biology; Archaeology and Heritage Studies. Two postgraduate students were completing degrees in issues in applied psychology and the dynamics of domestic violence. Students were involved in a wide range of projects including: an evaluation of a healthy eating initiative with primary school children; an investigation of violence in videogames from a design prospective; an evaluation of safeguarding on return interviews with children and young people; and an analysis of Molluscan assemblage.

Analysis

After they had completed the four to 10 weeks' vacation research assistantship, students were asked for written feedback on the scheme, consisting of a short paragraph of what the student did, and what they had learnt from their experience. Staff who were supervising the students were also asked to complete an end of project report, which was in a standardised format, including: aims and objectives of the research project; activities undertaken by the vacation research assistant and methods employed; outputs from the project; and benefits to the vacation research assistant. This feedback from student and staff highlighted perceptions of the scheme and was analysed using thematic analysis.

Results

Feedback from the scheme

The scheme received positive feedback from both students and staff.

Feedback from students

Students commented that they believed the scheme would be of great benefit to their future careers and gave them experience that they would not have achieved otherwise:

I think this experience will greatly benefit my future career as it provided a platform for me to utilise the skills I possess within the psychological field, and has given me the opportunity to gain so many more. This assistantship shows future employers of my interest and ambition in this area which was not possible from my previous employment history or experience to date.' 1st year undergraduate

'My participation in the project and its successful completion should prove a valuable asset to me in the future when applying either for research positions or employment; it shall confirm to potential research supervisors or employers that I have the ability to perform a respectable level of sustained, conscientious, and accurate work.' 3rd year undergraduate Students also commented that the scheme had provided skills that would be useful for

I have gained experience in writing an article in aim of submission, handling and organising a large data set, overcoming-barriers in data analysis and interpreting randomised controlled trials, quantitative statistical analysis using SPSS and Microsoft Excel and applying preliminary interpretations of research to systematically develop research examination.' Postgraduate student

their continuing studies:

Furthermore, students also commented on how the scheme had helped develop their soft skills:

I have developed my interpersonal skills; such as working on own initiative and professional communication.' Postgraduate student

Students commented on the lack of work experience available within a research setting and, therefore, welcomed the introduction of the scheme. They suggested that such a scheme enabled them to gain 'handson' experience of the real-world process and techniques:

It has really opened my eyes to how research in the real world is carried out... This role has given me invaluable experience of working in a research setting, as well as increasing my knowledge and confidence... I had to conduct a complex statistical test which I was unfamiliar with. '1st year undergraduate 'The project has given me a far greater appreciation for the level of effort involved in producing such work. The level of commitment required to perform research of this nature is not something to be underestimated.' 3rd year undergraduate

Feedback from staff

Staff members involved with the scheme also indicated positive attitudes. This was in respect to the effect on student's research skills and knowledge, future employability and their significant contribution to the overall project:

'As project manager my observation was that (the student) was able to develop her research, analysis and writing skills. (The student) worked very hard at all the tasks given to her, and showed much enthusiasm and motivation to learn about the research process. The VRA scheme clearly has benefits for staff as well as students: (the student) has produced an excellent piece of work which I hope will result in a good publication. Without her input this particular aspect of the project would not have been completed in such a timely manner.' Staff member: Senior lecturer in Psychology

'(The student) has proved to be an excellent vacation research assistant and has produced a good set of scientific results which could support additional studies towards a scientific publication.' Staff member: Lecturer in Biology

It was also reported that staff felt that the programme should continue as it helped to develop a student's learning and employability, as well as collaborative working between staff members and students:

I hope this scheme will continue – it is an excellent opportunity for student/staff collaboration, which enhances the student learning experience and promotes employability skills.' Staff member: Senior lecturer in Psychology

This experience will assist (the student) with his present undergraduate studies and provide him with an insight to the possibilities of independent research in the form of a post graduate study. Staff member: Lecturer in Archaeology

The end of project reports demonstrated that projects achieved the objectives as set out in the initial applications. For instance, most of the projects produced at least one output or will produce at least one output through work completed during the research assistantship, including a peer-reviewed journal article.

Discussion and conclusions

The aim of this article was to explore the perceptions of staff and students participating in a vacation research assistantship scheme, which aimed to provide undergraduates, recent graduates and new postgraduates with 'hands-on' experience of working on a research project for up to 10 weeks. The scheme was well received both by students and staff members; with a total of nine research projects being funded and a total of 163 students applying. The university-wide scheme was most popular among psychology students: 37 per cent of applications received were submitted by students studying a psychology degree. This suggests that psychology students identify clearly with the benefits of these types of schemes.

Both students and staff involved, felt that the scheme was of great benefit and should continue and overall, the scheme was considered to be highly beneficial to both students and academic staff. 'Learning by doing' produced many benefits for students; they were able to develop and improve their soft skills as well as refining their hard skills. For example, self-confidence; interpersonal skills; communication; and team work were developed which has shown to be essential for successful in employment as well as securing a position in employment through the interview process. The scheme also impacted upon a student's hard skills by improving on the knowledge of the subject as well as research skills.

addition the scheme provided students with relevant paid work experience which they may not have been able to achieve without this opportunity. Furthermore, the scheme helped to develop the student's interest and knowledge in the field, potentially leading to further education or employment in a psychology or research related career. Findings suggested that the scheme had similar impacts for postgraduate and undergraduate students. Typically such schemes are only available to undergraduates; however, our findings suggest that extending the scheme could be beneficial for postgraduates as well. The whole experience within this scheme significantly contributed to the student's employability; a huge benefit for the student in an economic climate with a highly competitive job market.

The scheme also provided students with the opportunity to see all stages of the research process, from the beginning start-up phase to write-up and publication. Furthermore, it gave the student an opportunity to engage with interpersonal and team working skills through actively participating within an energetic academic research team. Hence, the scheme provided academic staff with the additional support of a vacation research assistant, whilst also providing them with the opportunity to engage, support and mentor students and potential future research academics.

In conclusion, the positive impact of the scheme for students and staff confirms the value of the scheme for student development at undergraduate and postgraduate level. Furthermore there is likely to be a wider advantage for academic departments in the longer term in terms of the research culture and an increase in outputs.

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