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Research-led Training: the PhD Experience Conference 2013 – Supporting the Student in Higher Education

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Abstract

In this paper, we report a postgraduate led project at the University of Hull to build upon and develop transferable skills for postgraduates. The PhD Experience Conference 2013 was developed as a way of providing a blended learning experience for researchers and key speakers, to share good practice as an alternative, or in addition to, the more formal classroom experience. One of the innovative approaches of this conference was to use the Vitae RDF wheel to structure the key themes of the conference, relating its formal organization to areas the students felt relevant to their need for development, to achieve the PhD degree and subsequent career goals. This approach enabled research students to have an additional support mechanism to overcome issues of isolation, to comprehend what a PhD is all about, and to submit a reflective journal (5 credits) or a report on chairing a conference (10 credits) to gain transferable skills and credits towards their Postgraduate Certificate in Research Training at the University of Hull, alongside their research degree.

"This project is led by the research students, for the research students". Kaylara & Nadine

Keywords
Personalised learning, Vitae, educational modelling, higher education, transferable skills

1. INTRODUCTION:

The process of learning can be recognised as complex and individualistic. As individuals the ideal learning scenario would be a learning environment tailored to how one person learns (Costello & Mundy 2009). However, this is not simply enough as a means of providing a tailored learning experience for postgraduates within Higher Education Institutions (HEIs). Metcalfe (2002) indicates that institutions are less likely to provide students with *"transferable skills such as team working, and particularly employment-related skills such as career planning, CVs and interview techniques"* (Metcalfe 2002, p14) but much more focus on research techniques, as this helps directly with their studies. According to Craswell (2007), Campbell et al., (2008), Alpay & Walsh (2008) and Manathunga et al., (2009) Higher Education institutions are now trying to address the issues of identifying and improving transferable skills required within the industry.

As indicated by Vitae, students need to gain *"the knowledge, intellectual abilities, techniques and professional standards to do research, as well as the personal qualities, knowledge and skills to work with each other and ensure the wider impact of research"* (Vitae 2011). One way that Vitae strives to achieve this is through the Researcher Development Framework RDF, which supports the professional and career development of researchers. The RDF provides a professional development framework, which allows students to build upon existing skills or

to gain new insight and transferrable skills from tailored courses provided by the University of Hull, through their Postgraduate Training Scheme (PGTS). The RDF specification provides postgraduate researchers with the ability to relate their strengths, capabilities, and transferrable skills to the real life situations required by employers and the labour market (Saiti, and Prokopiadou 2008, Campbell et al., 2008).

Linsay et al., suggest that for postgraduates to build upon their research skills, supervisors must play an important role by encouraging students to develop a sense of "*interest, relevance or utility*" (2002 p 322) in relation to work-based transferable skills. Gilbert et al., (2004) indicate that students should develop a wider generic skill set, motivated by the belief that they will enable them to accomplish more after university. Swanwick (2008) builds upon the work carried out by Gilbert et al., (2004) and indicates that some postgraduate students might have already developed new transferable skills without having been aware of what was learned, either in the laboratory, or even within the work placement.

According to Craswell, transferable skills and specialist and domain knowledge associated with postgraduate degrees should be seen as "*not mutually exclusive*" (Craswell 2007, p.379). Craswell (2007) argues that postgraduate students throughout their degrees build and develop portfolios to support their own educational life cycle, from teaching, to bespoke programmes.

"*If doctoral degrees intend to develop graduates with broad-ranging skills, sensitivities, predispositions and other personal qualities, these need to be made clear, and the differences among them acknowledged*" (Gilbert et al., 2004 p386). According to Craswell (2007) and Gilbert et al, (2004) to enable postgraduate students to build upon skills necessary for industry, supervisors are key to identifying any skills gaps that might exist, and in encouraging them to address these. Craswell (2007) has similar views to Linsay et al., (2002): if the supervisor can offer interest, relevance or utility, then the postgraduate student will or might want to learn more transferable skills, within or outside their own research area. According to Brodie (2007) supporting and developing employability skills for students will help to build and develop local and national economic infrastructures within society. As mentioned by Craswell "*the employability discourse, perceptions of efficiencies are closely linked to the supposed skills needs of a new world economy*" (Craswell 2007, 379).

It is also important to restate that a PhD is not a single purpose qualification, and that transferable skills are what industry is looking for. "*For some time this single-purpose qualification has no longer fitted the expectations of students and employers. Increasingly, Government, funding bodies and Higher Education Institutions (HEIs) are questioning the nature of the PhD*" (Park, 2007, p6).

In this paper, we aim to present an approach tailored towards the requirements of Higher Education Institutions by providing transferable skills training for postgraduate students. "*HEIs should ensure that transferable skills training is embedded as a standard in the funding and design of all postgraduate research programmes*" (UK Government, 2010, p6).

The main contribution of this paper is to focus on the approach taken by the University of Hull to support and encourage the development of these transferable skill sets required by Research Councils and UK government by introducing the PhD Experience Conference as one element of transferable skills education.

1.1 *The Transferable Market " The PhD Experience Conference"*

During the research process, all the researchers i.e. MRes, MPhil or PhD remain entangled with a lot of difficult, perplexing questions. Some of these include: How should I manage the student-supervisor relationship? How should I manage my research? Am I capable of completing my PhD to a high standard? What should be the next step after a PhD? What tools should I use and how can I use them? Is it really worth doing a PhD? etc... Gilbert et al. note:

"*Student concerns that a research training approach emphasizes narrow competency-based training and ignores students' contribution to knowledge. Similarly, students have argued that the term training rather than education is an inappropriate description of 'the richness of the postgraduate research experience', and will undermine knowledge production and generation*" (Gilbert et al., 2004, P2)

The PhD Experience Conference 2013 aimed to help students answer these common questions and address the issues raised by Gilbert et al., (2004). This PhD experience conference aimed to help research students find appropriate answers, irrespective of their level in the research process and built upon industry related transferable skills.

This conference aimed to
  * make early stage researchers aware of imminent difficulties
  * provide a friendly environment for peer learning
  * introduce researchers to necessary research skills
  * provide leading industry standards, that can be shared across disciplines
  * encourage students to develop a sense of "*interest, relevance or utility*"

The conference aimed to achieve these goals by "*By embedding career-relevant knowledge and skills into course content, professional and accredited courses prepare postgraduates to apply their learning in a work environment*" (UK government 2010)

The PhD Experience conference not only provided PhD students with credits towards their Postgraduate Training Scheme (PGTS) but also a chance to seek help and advice from other researchers in the same or different research areas. This unique gathering of diverse groups helped students to cope with a variety of different problems associated with their research, and share cross-disciplinary concepts.

1.2 *Postgraduate Training Scheme*

The idea of the PhD experience conference is to encapsulate and bring together the Researcher Development Framework (RDF) with transferable skills that students think relevant, to enable students to achieve credits towards their Postgraduate Certificate in Research Training. The Postgraduate Training Scheme enables researchers to build and develop a working portfolio to assist them to work in an ever-dynamic, changing environment. The PGTS is not like other Programmes, with a core number of 20 credits and a set of optional modules; instead students conduct a Training Needs Analysis against the Joint Skills Statement with their supervisors and choose modules on the basis of

appropriateness for their Personal Development Plan (PDP) with the aid of the RDF. Participants of the PGTS are required to complete 60 credits (without exemptions), which qualifies the students for the award of the Postgraduate Certificate in Research Training. If further training is undergone and that student achieves another 60 points (which totals 120 credits) they will then qualify for a Diploma in Research Training (no Masters degree).   The Graduate School at the University of Hull holds an award ceremony each year, with the Vice-Chancellor', or Pro- Vice-Chancellor' (Research) presenting certificates.

2. RESEARCH APPROACH:

The research approach adopted within the PhD experience conference builds upon the previous feedback, gained from other researcher led events (Mercer et al., 2011). To enable this whole project to work, a mixed method approach (Giddings 2006, Bonk et al., 2008, Britian et al., 2008, & Creswell & Clark 2010,) was used. The views of postgraduate researchers were collected through focus groups and online questionnaires. The results from the focus groups and online questionnaires enabled research to be carried out, enabling themes and relationships to be created from a cross-disciplinary background. Out of 120, 2012 conference participants, over 50% took part in the research and responded to questions about what themes they thought would be important for the 2013 PhD Experience Conference. The online questionnaire set was distributed through the Graduate Virtual Research Environment (GVRE) online learning environment (Costello et al., 2012), which was used to capture a snapshot of what postgraduate students were looking for, to supplement the information gathered from the focus groups. Of the 1000 students contacted through the GVRE, 10% responded. The information gained was used to design the survey for the PhD Experience 2013 participants. Combining the GVRE response and also the focus groups, a total of 160 students were involved in the investigation.

2.1 Responses from 2012 conference

The empirical research conducted on the responses from the 2012 conference, the focus groups and also the GVRE on-line learning environment was then developed into themes for the 2013 conference relating to the RDF Wheel, to identify key transferable skills for the development of research students.

The empirical research from the focus group highlighted a necessary area of support, within the following areas:

- Research Process & Perspective; Research and IT Skills; Balanced Researchers
- Networking; Viva Voce; Publication and Write-up and Career Management

These areas highlighted from the 2012 conference confirm what Metcalfe (2002) indicates, that postgraduates are not getting sufficient guidance on other areas of their PhD, such as career management. As indicated by Craswell (2007) and Gilbert et al, (2004) this could be because many supervisors do not see "*interest, relevance or utility*" in these activities (Linsay et al., 2002 p 322).

Reflecting on the 2012 conference limitations, research students would be able to build upon these and develop a sense of "interest, relevance or utility" from the RDF recommendations (Vitae 2011):

- Domain B: Personal Effectiveness; B3 Professional and career development (Career Management, Networking): B2, Self management; Skills achieved for organising, time management and work/life balance (Balanced Researchers, Research Process & Perspective):
- Domain C: Research governance and organisation; C2 Research Management.
- Domain A: Knowledge and intellectual abilities A1 to A3.
- Domain D: in regard to D1 Working with others & D2 communication, for organising and developing the event.

"If doctoral degrees intend to develop graduates with broad-ranging skills, sensitivities, predispositions and other personal qualities, these need to be made clear, and the differences among them acknowledged" (Gilbert et al., 2004 p386).

Using the RDF Domains A – D (Vitae 2011), and focusing on a diverse field of transferable skills, will provide research students with greater *employability skills and higher expectations in what is achievable after their PhDs (*Vitae, 2009, UK government 2010).

2.2 A qualitative response from 2013conference

The research design approach adopted within this project (Giddings 2006, Bonk et al., 2008, Britian et al., 2008, & Creswell & Clark 2010) involved asking participants for qualitative responses after the event, based on what they enjoyed from the PhD Experience Conference 2013. Out of 100 postgraduates who attended the event, almost 50% of students responded. Some of these comments are listed below and divided into two sections, positive and then constructive feedback.

2.2.1 Positive feedback

"I think most of the speakers this year are useful and professional in their field and really give vital speeches."

 "I found this to be a very interesting conference; all of the speakers were very knowledgeable and presented up-to-date, usable information. I feel that having attended the conference I am now better equipped in my studies, especially as I have learned additional study techniques. I would like to say thank-you to all concerned for running this event."

"I found most of the material seemed to be practically relevant for scientist, business school students and overseas students."

"I am very grateful that I had the opportunity to attend a conference at this early stage of my PhD. It provided me with some really useful information at a time when I needed it most and it will certainly shape my research for the better – thank you"

2.2.2 Constructive feedback

"I thought seven themes in 2 days was ambitious and at times would have liked to listen to fewer speakers for more time".

"Jam-packing the duration should have been longer. May be only 2 themes a day".

"Some speakers explained things which should have been done in a lab so students could catch up those processes in complete".

"Sadly some topics were just touched in a superficial way because of time constraints."

By analysing the Positive and Constructive sets of responses, it is quite clear that students overall were impressed with the PhD Experience Conference. Some participants did indicate that certain key themes of the RDF could have been simplified and supported through workshops to expand on key features, which will be taken into consideration for the conference next year. In general the majority of the responses have indicated that the general concept of the PhD Experience Conference enables fellow researchers to share good practice and techniques to help others that are not just relevant within education, but also in industry.

3. TRANSFERABLE SKILLS

3.1 *Transferable skills developed by chairs of the PhD Experience Conference 2013*

Statements from Kaylara, & Nadine about skills learnt.

"In order to gain and maintain skills outside of the purely academic researchers need to be pushed to gain community experience within their own University and academic community. In this way the PhD Experience Conference gave me awareness of the vast community of an individual university as well as the community of universities within academia. There are many business and organizational skills required in order to put on a conference successfully. Running a conference as a researcher allows a student the opportunity to develop time management, crisis management and life management skills while also reconnecting to the business and career side of their studies"

"The PhD Experience Conference had taught me to be broader minded in my approach. I am researching History and Literature and have spent a great deal of time in libraries and isolation. During the conference I had the opportunity to work alongside researchers in different disciplines such as medicine, chemistry and business who gather, process, and think about research completely differently than I had been. In gaining a broader academic perspective I became a much better organizer over the course of planning the conference"

Kaylara A Reed.

"I am a second year marketing PhD student and for me the first motivation to participate in the actual organisation of the conference was to improve my transferable skills because it can be very daunting when doing your PhD all day every day. So this way I hoped to engage and collaborate with academic researchers. But I got so much more out of it, because I improved my soft skills by organising the conference. These improved soft skills are not just currently helping me with my PhD process but moreover give me more confidence when applying for jobs in the future"

"From the very beginning we had to define goals within our limited time frame and we needed to achieve those. Rather early in the process we realised that we made a few mistakes which we than noted down to evaluate and analyse later on to improve next year's project. And I immediately applied this skill also to my PhD so when something does not work out as planned not to leave it but learn something from it to improve it next time"

Nadine Waehning-Orga.

3.2 *Skills learnt from the PhD Experience Conference 2013*

There were 12 postgraduate students who helped organised the 2013 PhD experience conference from arranging the different themes, to contacting the delegates and monitoring the financial budget. Using the RDF wheel from Vitae, the following skills can be identified, please see Table 1: skills developed within the PhD Experience Conference

Domain D Engagement Influence and impact *"The knowledge and skills to work with other and ensure the wider impact of research"*	Working with others (D1)	Team working, people management, collaboration, equality and diversity
	Communication and dissemination (D2)	Communication methods/media/publications
	Engagement and Impact (D3)	Developed awareness of public engagement
Domain C Research governance and organisation *"The knowledge of the standards, requirements and professionalism to do research"*	Research Management (C2)	Project Planning and delivery, research strategy
	Finance, funding and resources (C3)	Funding generation (ticket sales, advertisement), Financial management (budgeting, gifts for speakers, and room booking)
Domain B Personal Effectiveness *"The Personal qualities and approaches to be an effective researcher"*.	Personal Qualities (B1)	Responsibility, and perseverance,
	Self-management (B2)	Time management, preparation and prioritisation.
	Professional and career development (B3)	Networking
Domain A Knowledge and Intellectual abilities *"The knowledge intellectual abilities and techniques to do research"*	Knowledge Base (A1)	Information seeking
	Cognitive Abilities (A2)	Analysing, critical thinking, evaluating and problem solving
	Creativity (A3)	Innovation

Table 1: skills developed within the PhD Experience Conference

4. DISCUSSION ABOUT SUPPORTING THE NEEDS OF POSTGRADUATES

The evidence from constructive feedback section 2.1 supports the research carried out by HEFCE and the Higher Education Commission 2013 that Higher Education institutions are identifying and improving transferable skills within the industry (Craswell 2007, Campbell et al., 2008, Alpay & Walsh 2008 and Manathunga et al., 2009). According to HEFCE (2013), the *"PGR area was generally in good health and the sector had made efforts to expand and strengthen its research provision, creating an appropriate and well resourced environment"* (HEFCE

2013, p34) and with the help of QAA enables universities to set expected outcomes and create high *"quality research opportunities and support"* (p34). Reflecting upon the constructive responses from this study, it is clear that the PhD Experience Conference has improved the quality of the research opportunity and support as mentioned by HEFCE.

According to HEFCE (2013) and the Higher Education Commission (2013) there has been a steady improvement to the HE sector, for example: with regard to support mechanisms, raised standards and improvements within universities expectations required by the QAA. However, much more work is still needed to be done, due to rising costs of tuition fees (Higher Education Commission 2013), *"recession and the contraction of the public sector"* (HEFCE 2013, p53) and employability issues when postgraduates leave. HEFCE (2013) suggests that one way to improve sustainability within Higher Education is to introduce a similar funding system to that of the UK undergraduate schemes that enable home UK students to apply for a loan to cover fees and living expenses.

The Higher Education Commission (2013) has indicated that *"the REF is also a driver for the culture of 'publish or perish' which has contributed to the narrow nature of the British PhD"* (Higher Education Commission 2013, P16). Further analysis of the report indicates that the government and local industries must come together to fully understand what skills postgraduates do actually provide and what benefits they can reap from skills developed during the time spent researching.

One possible solution to overcome this narrow nature of the British PhD is to have: *"A long-term, considered approach",* not only focusing on *"current skills needs, but must apply a degree of foresight as to what our future economy will likely require. Adopting a 'just in time' model for dealing with skills shortages is not enough"* (Higher Education Commission 2013, P30).

5. CONCLUSION AND FUTURE WORK

In this paper, we explored the design and the outcomes of the PhD Experience Conference 2013, which was a research student-led project at the University of Hull. The PhD Experience Conference was developed to provide students with a rich learning opportunity relevant to research students, to highlight issues and problems faced by postgraduate researchers every day and what skills they could learn from replicating this event within other HEIs. According to HEFCE (2013) and the Higher Education Commission (2013) there has been a steady improvement to the HE sector for example: with regard to support mechanisms, raised standards and improvements within universities expectations due to the QAA, which can be seen within the results from section 2.1.

The conference was designed and organised by the research students, to achieve transferable skills that can support them within industry as indicated by (Higher Education Commission 2013). By using academic aids, like that of the RDF wheel and the Vitae resources, we argue that we can provide a greater insight into what skills are needed, not just in academia but also in industry.

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