After a Career Break: Supporting Women Returning to ICT A Case Study

Clem Herman

The Open University, U.K.

ABSTRACT

This is a case study of an initiative to support women returning to ICT after a career break, which was run in the UK and Ireland between 2005 and 2011.The article starts by outlining how the UK government's concern about women failing return to SET careers led to the setting up of a national campaign (RETURN) to address this issue. A brief overview of previous research about women's reasons for leaving ICT employment and the difficulties and barriers they encounter in returning to work, sets the context for the development of the online course *Return to SET*. An outline of the course and its innovative support model is then described followed by a discussion about measurement of impact and concluding with some suggestions for future development.

After a Career Break: Supporting Women Returning to ICT

INTRODUCTION

This case study discusses an online course to support women scientists, engineers and technologists that took place in the UK and Ireland between 2005 and 2011, and which has to date included nearly 1000 participants. While the course is aimed at those returning to all fields of Science, Engineering and Technology (SET), the focus here is specifically on returning to ICT. The background to the initiative was the UK government publication *Maximising Returns* (People Science and Policy 2003) which raised concerns about the large numbers of women with high level qualifications in SET subjects who did not return to the sector after a career break. This report resulted in the funding of a specific UK wide programme, founded in 2004, to address this issue, which was promoted as the RETURN campaign under the auspices of the UKRC[1]. From 2008 support for returners by the UKRC became subsumed under the more generic title *Services for Women*. Central to the overall strategy to 'maximise returns' was the development of an on-line distance learning course run by the UK Open University (OU). An outline of the course and its innovative approach will be described below, but full details are beyond the scope of this paper and indeed have been reported elsewhere (Herman et al., 2011; Herman and Hodgson, 2010; Herman and Kirkup, 2008)

The participants are described here for convenience as returners although, as has been argued in an earlier paper, the term 'women returners' may need to be revisited to reflect more accurately the changing patterns of women's employment over time and within different cultural contexts. Rather than assuming a single lengthy period away from paid employment, which characterised women's career breaks in the past, interventions to support 'returners' need to reflect the diversity and changing situations of women over the life course, and should provide flexible strategies that take into account the range of experience at different stages (Herman and Webster, 2010). Nevertheless, there are common characteristics that women who have taken time out of paid work often encounter. These characteristics have a gendered dimension linked to wider cultural expectations and norms about women's roles in the domestic sphere as well as in the workplace, and are more acute and specific for those wanting to return to ICT and other male dominated professions.

CONTEXT

Research about women in ICT has tended to focus on either the educational 'pipeline' or the workplace. As Castaño and Webster (2011) comment, the leaky pipeline analogy presents some serious limitations as a tool to adequately explain and analyse under-representation of women in ICT. While there is now a significant body of research about the culture of ICT work places, which explores the gendered context of technology work, the experiences of women who leave ICT work have rarely been addressed, and yet these could provide important insights into some of the problems within education and employment in the sector.

Hewlett (2007) found that most career breaks were a result of complex interactions between 'pull factors' (centred within the family) and 'push factors' (centred at work). Forty five percent of the participants in Hewlett's study stated that childcare can often be the trigger, however it could be an elder care issue (which often happens in a crisis rather than a planned situation) for those in the so called 'sandwich generation' (aged 41-55). But 29% of the women in Hewlett's sample took a break because their career was not satisfying: being under-appreciated, or not gaining promotion were more frequent than being overworked. Griffiths and Moore (2010) identified four types of 'leavers' from the ICT sector including those who are discarded, alienated or who moved to other non technical occupations, and finally 'potential returners'. It is this group that are the subject of this case study.

Taking a life course perspective is a useful approach in identifying the different needs of potential returners relating to different stages of their lives. For women with young children, or those with other caring commitments such as for elderly relatives, there are often constraints on mobility and hours of work. The technology sector in particular has a reputation for its 'long hours culture' (DTI, 2004). In 2009, 35% of UK ICT staff worked more than 48 hours a week and 7.3% worked 60-75 hours per week (Thomson, 2009). Although flexible work is possible and widespread, it is difficult to find a job that is advertised as part time (Pantelli, 2006). As a result, many returners seek and find ICT employment opportunities within other sectors, such as health or education, where the working norms are more easily combined with family care. However this is often lower skilled and lower paid than the work they did before their career break. As well as early motherhood, midcareer is a point at which women's attrition rates rise due to powerful 'antigens' in SET cultures such as isolation, mysterious career paths, hostile macho cultures , systems of risk and reward and extreme work pressures (Hewlett et. al., 2008). For older women there are barriers related to their age; indeed ageism was often cited as a reason for leaving the sector, with the prevailing culture dominated by young men (Marshall, 2010).

Recruitment practices in the sector make it hard for returners of any age. Many companies use recruitment agencies who automatically screen out those without recent work experience (King et al., 2005). Technical skills quickly become out of date and for ICT professionals there is an expectation of constant updating, which is often considered to be a personal responsibility rather than that of their employer. Unlike scientific or engineering careers, long term professional career paths are not well established within ICT work, and indeed are constantly evolving. This means it is not always easy to know how to get back in or what opportunities are available.

Yet while there are clearly significant barriers for women wanting to return to ICT work, there is a danger of over stressing the difficulties and failing to highlight the opportunities. Some of the prevailing myths that perpetuate the image of ICT as being unsuitable for returners could, and indeed should, be challenged.

Although specific applications and skills may have changed, some ICT skills, such as project management, are generic and transferable. Moreover, new hybrid roles are emerging that often require a non-standard skill mix and are difficult to fill through standard recruitment processes. In addition, the expectation that ICT

workers should constantly up date their skills means that being a returner might only be a short term barrier, which could be overcome by undertaking appropriate training courses. The location of ICT companies is often cited as a barrier. However rather than being employed by major multinational companies, in fact most ICT workers are employed by small and medium size enterprises (SMEs) (Marshall, 2010). In addition remote working is feasible for many ICT roles and should lead to more rather than less flexibility. Finally, a career break should not be seen as atypical within this sector. In fact few ICT careers are continuous and unbroken. Most ICT professionals rarely work for one company for life, and often have boundaryless careers, perhaps moving from employment to freelancing or self employment later in life.

THE RETURN TO SET COURSE

The context of these issues facing women returning to ICT and other SET sectors, informed the development of the innovative online course *Return to SET*[2] by the Open University in partnership with the UKRC. The design of the course made use of the OU's extensive expertise in distance learning and what were (in 2005) relatively new and innovative learning technologies. The 10 week module was developed so that it could be studied entirely online. This was a deliberate choice so that it could fit around other commitments, such as childcare, and be accessible to individuals who would not otherwise be able to attend a regular course due to their geographical isolation. Participants collaborate in an online learning environment where a number of structured activities enable them to share experiences and get support from others, encompassing issues such as work life balance. The course starts with a process of reflection on previous work and life experiences using an innovative e-portfolio system. Current trends in the course participants' own industry sector are then identified with the help of visiting experts who answer questions in an online forum. The assessed element of the course includes creating an up to date CV and an action plan to identify short term and longer term steps leading to a return to work.

During the first three years additional funding from the EU Equal programme[3] enabled additional support activities to supplement the online programme. These included tutorial groups and networking events in local areas, for which childcare and travel costs were available (the course itself was free of charge). In addition, large scale marketing for the course in the national press resulted in enrolments from even the most remote areas of the UK. The UKRC also provided a range of other services as part of the RETURN campaign. After 2008, a revised version of the course became 'mainstreamed' into the Open University's curriculum. Fees for many but not all the participants were subsidised by bursaries from the UKRC. The UKRC also provided a range of support interventions such as peer mentoring circles, one-to-one advice sessions and continuing professional development (CPD) workshops, which were organised and delivered by UKRC staff in regional and national hubs but were not exclusive to course participants.

The project has been innovative in many respects - in delivery, in scope and in partnership. The first key area of innovation has been in the use of innovative learning technologies to enhance social presence and networking between participants, such as e-portfolios, online forums, virtual world environments and,

latterly, collaborative wikis. Secondly, the course has been unique in being large scale but with local presence. Participants have come from all over the UK and Ireland. During the initial 3 years, additional funding enabled local groups to meet face–to-face at the start and end of the course and attend networking and other events in their areas. Local activities continued to be provided from 2008 to 2011 by the UKRC regional hubs and national centres[4]. This national partnership is the third area of innovation worth noting, creating an integrated approach capable of responding to changing environments and resource constraints.

MEASURING IMPACT

One of the most persistent problems with understanding the value of initiatives such as these is how to measure their impact. As with other funded programmes, the monitoring and evaluation requirements were shaped to some extent by external criteria and driven by quantitative targets. So figures about entry to employment or further training might well be expected to be the prime indicators of success. An evaluation study was carried out with the original cohort of participants (see Dale et al., 2007 and Herman and Webster, 2010 for details). In a follow up study in 2011 out of the 57 course participants who responded, 32 said they were now working part time or full time in SET related jobs. However, given the complexity and diversity of experiences of 'returners', figures such as these do not easily capture the range of positive outcomes. It is important to include 'soft outcomes', such as increased confidence, as well as non-paid work outside of the labour market. The UKRC tracked a range of 19 positive outcomes for women using their services between 2008 and 2011. From over 2500 women (25% of whom were returners to SET careers and 30% women seeking career progression), over 850 positive progression outcomes were reported by the end of the programme in March 2011.

One innovative approach has been to look at 'social return on investment' (SROI), which takes into account the wider implications of interventions and initiatives. As well as actual employment or further training outcomes, this means recognising the importance of measuring 'soft outcomes'. So for example positive outcomes from the UKRC's SROI report include increased self esteem, less isolation, more confidence and feeling better informed (Rehman 2010).

The assumption is that such soft outcomes are the first step towards a return to work, and indeed some women explicitly recognise the link between these and their eventual return to employment. For example, one course participant commented:

> I have recently accepted a job working as a software engineer. The [course] was a crucial part in my journey towards getting started in commercial work again. It was so important in building up my confidence and helping me make key decisions about my own skills set and the opportunities available to me locally. ..I would recommend it highly.

An increase in personal confidence has been a recurring theme that has emerged from the evaluations, as well as from discussions on the course forums. In particular the experience of meeting other women with similar issues is very

powerful and reduces the sense of isolation, a feeling described by some as "being in the same boat". As one participant commented:

> The course improved my confidence … and got me in touch with other women in the same situation. It was great to know that I wasn't alone. I managed to build a good network out of it, and most importantly for me, it helped me put together a successful job application.

WHERE DO WE GO FROM HERE?

Public funding cuts in the UK, both to the UKRC and to universities, mean that the model described above is no longer sustainable. The Open University team are now in the process of reflection and planning for continuation of the work in a different shape. Clearly there is still a need for support for women returning to ICT after a career break. We have seen initiatives come and go, but individual women at different points in the life course are still facing the same issues, and many of them need structured support if they are to successfully return to their ICT roles.

Nevertheless, further longitudinal research needs to be undertaken to understand the long term impact of initiatives to support women returning to work, and to inform the design and development of responsive and effective interventions. Making such provision sustainable is always going to be a challenge. In austere times we cannot rely on public funding to sustain this work. Partnership with employers who have a vested interest in acquiring talented and skilled professionals is clearly important. Thus employers and recruiters need to be made aware of the barriers that they present to returners, and the need to widen their selection criteria when attempting to attract new employees, including recognition of the value of previous work and life experience that those returning from a career break can bring. Yet while initiatives to encourage the ICT industry to make changes are laudable, the reliance on the 'business case' argument is not sufficient to bring about sustained culture change (Glover and Evans, 2011), and this can only be part of the picture. The perspectives of gender activists, employers, educators and policy makers may all differ on this issue, but it is clear that women returning to ICT after a career break still need support in order to achieve their potential.

ENDNOTES

[1] Initially known as the UK Resources Centre for Women in SET
[2] The Open University refers to courses and modules with course codes. This course began as T160 and then after being revised in 2008, was known as T161
[3] The JIVE Partners project - http://www.jivepartners.org.uk/about/results.htm
[4] These included the Scottish Resource Centre for Women in SET, the Wales Resources Centre, the South East Hub as well as central staff operating from the UKRC's centre in Bradford, Yorkshire.

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