Chapter 6

Against All Odds, From All–Girls Schools to All–Boys Workplaces:
Women’s Unsuspecting Trajectory into the UK ICT Sector

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ABSTRACT
The trend for women to be severely under-represented in the UK ICT (information and communication technology) sector persists. Girls continue, year in year out, to excel in academia whilst initiatives are put in place to challenge the gender employment gap in ICT professions. As part of a larger research study of women in the ICT labour market, over 500 women were asked about their initial routes into ICT; this included educational backgrounds, influential factors and perceptions of that transition. In analysing the findings we attempt to explain the tendency for women in our sample group to come from single-sex schools and to have a predilection for mathematics and the sciences, then move into male dominated educational and work environments. Our findings report on the personal experiences of women’s unsuspecting trajectory into the UK ICT sector.

INTRODUCTION
There is a declining minority of women taking ICT and technology related subjects at school and University in the UK and the numbers of ICT professionals in the labour market are similarly at an all time low comprising around 15% (EOC 2004). Women ICT students are commonly a small minority and experience similar isolation in higher education. Often excluded, facing direct and indirect discrimination, stereotyping, with barriers to advancement (Adam et al 2006), research indicates that women leave the ICT profession in disproportionate numbers (Platman and Taylor 2004) vowing never to return (Griffiths et al 2007). So an interesting question remains: why do women study and work in ICT at all? This chapter draws on empirical work from six research projects completed during 2004-2006 that investigated the severe under-representation
of women in ICT professions. Research has suggested that the backgrounds and entry routes of women ICT professionals are diverse and unpredictable (Webster 2005) and include women who excelled in maths and science or those with support from parents or a particular teacher. Accidental encounters with computers have often been the root of a passionate interest and rather than being alienated from technology many have been attracted to the opportunities of analytical problem solving and the creativeness of the work (Webster 2005). Faulkner (2005) discussing the entry routes of women engineers found them to be often ‘unusual’ women, rebellious, remarkable, those who were seeking a challenge but always with a story to tell.

In this chapter we tell the stories of the experiences of 14 women of the 500 plus ICT professionals in the UK who participated in our research. Against all odds many developed a passion for working with computers often stemming from experiences at home and in single-sex education. Their routes into the ICT profession are varied and generally involve experiencing a shock when moving to University classes or workplaces where for the first time they experience themselves as one of very few women. We examine studies that have advocated all-girls schooling as a counter to the ‘masculine domain’ of technology education (Clegg 2001), yet the ‘jury is still out’ (Speilhofer et al 2002) on whether this is a significant factor informing gendered career choices. In this chapter we present rich descriptions of women’s trajectories into the ICT labour market and the opportunity for interesting stories of – in our view - remarkable women to be heard. We firstly outline the situation of women in the UK ICT labour market and an opportunity for interesting stories of – in our view - remarkable women to be heard. We firstly outline the situation of women in the UK ICT labour market and introduce some issues related to technological education and single sex schooling. We then develop specific themes from our case study research informed by social and structural influences (Adya and Kaiser 2005) that have shaped women’s career trajectories. Social influence for example involves gender stereotyping and the influence of teachers, families and media. Structural influences include institutional support and access to technology and opportunities.

**WOMEN IN ICT IN THE UK LABOUR MARKET**

Employment in the ICT sector has continued to grow significantly in recent years and e-Skills UK (2008) have predicted that it will grow at 2.5% per annum, which is five times faster than the average employment growth of the UK. However this growth has not led to a parallel increase in women’s participation in the ICT labour market. Women’s employment figures in ICT are in decline, despite twenty years of continuous efforts and concerns of policy makers and gender equality practitioners (Webster 2005). Given that there have been decades of equal opportunity and related policies as well as many government initiatives designed to address the gender imbalance in ICT employment patterns, sex segregation in ICT occupations and a gender pay gap in the ICT sector, we could be forgiven for assuming that these initiatives have had a beneficial effect on the position and number of women in the ICT workforce. However, although we cannot make any comment on the success or failure of any specific initiatives the statistics continue to highlight that women are hemorrhaging out of the UK ICT workforce (Platman and Taylor 2004). The so-called ‘leaky pipeline’ for women in technology employment (Sanders 2005) is contributed to by various factors. There is often a requirement for 24/7 (24 hours and 7 days a week) presenteeism (a phrase meaning the social/peer pressure to be seen to be at work beyond the call of duty and beyond contract stipulations, possibly to improve promotion prospects) raising issues about work-life balance for women (Tattersall and Keogh 2006). Women can also experience hostility and isolation at work (Adam et al 2006) and significant events can trigger an exodus (Griffiths et al 2007).