Abstract: Factors which influence girls’ orientation to ICT subjects in schools – evidence from the UK

Dr Rachel Palmén

Girls’ choice or more accurately, not choice of ICT subjects in secondary education is often studied not only as an interesting topic in itself but usually in order to explain why women are under-represented in ICT careers. Decisions made in secondary education are seen to have a cumulative effect over the lifecycle precluding women from future ICT careers.

In the UK since 2005 there has been a significant drop in girls and boys taking ICT at GCSE level - although the proportion of girls as ICT entrants has actually increased (UKRC). At A-level the number of girls taking ICT and computing has dropped. The U.K.s IT industry however, is growing at 5-8 times the national average and around 150, 000 entrants are needed each year. Currently less that one in 5 of those undertaking IT related degree courses are women and less than one in five of the IT workforce is female.

Research in the field of ICT education and gender has tended to focus on the differences between boys and girls and their relationships with ICT in terms of learners’ performances, attitudes towards computers and skills, confidence and self-efficacy which often result in differential time consumption, frequency and patterns of ICT use. The impact of teachers, parents and peers on pupils choice of study both in the school and in the home have also been identified as having gendered dimensions in terms of influencing outcomes. The use of ICT for leisure purposes has been recognized as perhaps the key arena where the differences between boys and girls are most striking.

These findings have often been interpreted as possible explanations as to why girls do not choose ICT education nor become ICT professionals. There has however been little research looking at how wider contextual and cultural issues can actually shape girls propensity to study ICT. This paper attempts to locate girls’ choice/ not choice of ICT education and professions to a wider educational context.

In the UK there seems to be an absence of policy specifically focused directly on ICT and gender in schools. The implicit gender dimension however of ICT and educational policy seems to be geared towards how the potential of technology might improve boys’ overall educational performance.

Despite this overarching concern with boys attainment, a specific employer backed initiative the Computer Clubs for Girls aimed to get 11- 14 year old girls more interested in computers by tapping into their so-called interests, for example ‘fashion’ and ‘celebrity’. This initiative has been hailed a ‘success’ with over 100, 000 girls in over 3,600 schools across England involved. Since 2010 the proportion of girls as ICT entrants at GCSE level has actually increased although this has yet to be attributed to the success of CC4G. ‘Computer Clubs for Girls’ has however become ‘Connect, Create and Go’ in an attempt to attract boys-as well as girls – partly as a recognition by employers that overall numbers of ICT students are declining. The effects of opening up CC4G to boys on the participation of girls in ICT studies
however remains to be seen – although it bodes bleak as an attempt to redress the under-representation of women in IT professions.