“What’s Your Problem?”
ANT Reflections on a Research Project Studying Girls Enrolment in Information Technology Subjects in Postcompulsory Education

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ABSTRACT

Despite more than 30 years of gender reform in schools, the percentages of girls enrolled in information technology subjects in the post-compulsory years of education has remained persistently low: often under 25%. This article investigates data collected during an Australian Research Council Linkage Grant project (2005-2007) focused on identifying the reasons for this under-representation, and ways in which the situation could be changed. The article looks beyond the official recommendations of the project to explore how the research experience and the data combine to raise important questions about the limits of research in this area. The authors discuss the difference between the researchers’ perception of the problem under consideration, and the participants’ perception of the same issue. They use the resources of actor-network to highlight the gaps, tensions and contradictions within the data and to ask key questions about the extent to which the enrolment of girls in IT is indeed “a problem”.

Keywords: Actor-Network Theory, Gender Issues, Information Technology, Post-Compulsory Education

INTRODUCTION

The percentages of girls in Australian schools who elect to enrol in post comp-
ulsory information communication and computing technologies units has barely changed over the past twenty years hovering consistently around (and often below) 25% (James, et al., 2004).
Analysis of this statistic (and its persistence) has often focused on such factors as the impact this under representation has upon the total numbers of students studying information technology or related courses at university (hereafter referred to as IT); the looming personnel shortages in information technology professions (Wentling & Thomas, 2004); the impact that opting out of IT as an area of study has on girls’ future career paths, including the potential to reduce their chances of employment within lucrative and “in demand” industries, and, indeed, curtailing their ability to contribute to the construction of the kinds of technologically mediated futures that impact upon their lives into the short and long term future (Wajcman, 1991).

Despite the fact that these various versions of ‘a problem with girls and IT’ have received a reasonable amount of attention from researchers and industry professionals over the past twenty years, during this time there has been little impact upon the numbers of girls following the pathway to tertiary study of information technology. Indeed, the numbers of girls studying IT in schools are actually trending down. (AAUW, 2000; James et al., 2004)

In response to this scenario—and in recognition of an increasing anxiety within the IT industry about the difficulties of recruiting appropriately qualified staff into the field—a range of researchers’ and industry partners from NSW, South Australia and Victoria designed a multi-method, multi-stage project intended to identify the processes that lead to this gender gap and possible ways in which the situation could be challenged. The project was titled: From High School to Higher Education: Gendered pathways in information communication and computer technology education and ultimately received funding through the Australian Research Council (ARC) Linkage Project scheme. The project, referred to by the research team as the Girls and Information Technology Project or GAIT, had the following objectives:

- Identify the educational pathways and career outcomes for males and females in IT fields;
- Ascertain why the proportion of girls who enter education pathways leading to IT careers is so small;
- Identify strategies that might lead increased numbers of girls to qualify for, choose, and enter IT courses at the higher education level.

It worked to achieve these objectives through consideration of the following questions:

1. How do girls and boys decide what to study at years 11 and 12?
2. What are girls’ and boys’ understandings and opinions of senior secondary school IT subjects, IT career-related courses and IT-based careers, and what informs these understandings?
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