Dealing with “fragile identities”: resistance and refiguring in women mathematics students

Yvette Solomon, Lancaster University

This paper takes as its starting point the common observation that while many learners may be successful in mathematics they nevertheless see themselves as existing only on the margins of the practice, or as lacking stability in it — in this sense, they have what can be called a fragile identity. Although this is by no means the sole province of girls and women, they do appear to express such fragile identities more often or perhaps more readily (Seymour & Hewitt, 1997; Solomon, 2007a, 2007b; 2008). A range of research suggests that this sense of ‘not belonging’ may be in part due to the perceived ‘masculine’ nature of mathematics (Mendick, 2006) and the ‘identity work’ that being both female and successful in mathematics requires (Mendick, 2005; Rodd & Bartholomew, 2006). This paper presents an analysis of such ‘fragile identities’, exploring the ways in which differences in male and female responses are underpinned by discursive positionings which inscribe learners’ relationships with mathematics in particular ways and play a major part in their developing narrative of self. However, their individual and collective narratives also suggest ways in which they might resist, or refuse, the offered positions. Gee (2001) suggests that it is possible to ‘bid’ for a particular identity position or to resist invitations to take up an ascribed identity, while Holland, Lachicotte Jr, Skinner, & Cain’s (1998) concepts of figured worlds and of the authoring of identity enable us to see how individuals might draw on particular resources and discourses to re-figure their relationship with mathematics. Although learners develop relational identities in terms of dispositions to act in particular ways, these can be ‘disrupted’ when reflection enables recognition of positional identities which may then be objectified and challenged, and so lead to refiguring. In this paper, I examine the narratives of doing and being good at mathematics in three groups of undergraduates. I will show that they do indeed place themselves and others in particular positions and relations which reinforce the figured world of mathematics (Boaler & Greeno, 2000). I will suggest however that their stories can also demonstrate a challenge to this world, and a move towards its refiguring which finds voice in their expression of fragility and instability and at the same time enables some, but not all, to develop agency as successful students.

References