

GIRLS' PARTICIPATION IN SOME REALISTIC MATHEMATICS: REFLECTIONS FROM STUDENT TEACHERS

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This poster will report on a project designed to engage some initial teacher education students in action research in the context of activity days organised for school girls from a disadvantaged area of Northern England.

The teacher education students are in their first year of a two year route into secondary mathematics teaching. They will draw on ideas from the Realistic Mathematics Education tradition from the Netherlands (see, for example, Treffers 1993): that 'mathematics must be connected to reality, stay close to children's experience and be relevant to society ... offering the students problem situations which they can imagine' (van den Heuval-Panhuizen, 2000: 3f). The teacher education students will plan and develop a series of activity days on the theme of engineering mathematics, drawing on a wide range of published material (see, for example, Buxton, 1991; Gibbs, 1999; SMILE, nd). These days will contribute to a European funded project intended in general to widen the participation of disadvantaged groups in higher education and in particular to increase girls' participation in mathematically based subjects.

The students will collect data relating to the girls' experiences of the activity days. They will attempt to evaluate the girls' engagement in mathematics using an action research model. They will write individual reports of the project for their module assessment.

The poster will describe and display the work undertaken on the activity days. It will offer reflections from both the girls and from the teacher education students.

References

- Buxton, Pam (1991) *Music/Connections Theme Book, Century Maths*, Cheltenham: Stanley Thornes
- Gibbs, William (1999) *Mathematical Window Patterns*, Diss, Norfolk: Tarquin
- SMILE (ND) *Cabbage*, London: SMILE
- Treffers, A (1993) 'Wiskobas and Freudenthal Realistic Mathematics Education', *Educational Studies in Mathematics*, 25, 89-108
- van den Heuval-Panhuizen, Marja (2000) 'Mathematics education in the Netherlands: a guided tour', *Freudenthal Institute CD-rom for ICME9*, Utrecht: Utrecht