

FACULTY OF EDUCATION, UNIVERSITY OF CAMBRIDGE

MICHAELMAS TERM 2011

CAMBRIDGE COLLOQUIA IN MATHEMATICS EDUCATION

Monday 24th October 2011 at 5.00 p.m., Room 205, Mary Allan Building, Hills Road

Professor Julian Williams, University of Manchester

THE USE OF 'VALUE' IN MATHEMATICS EDUCATION: CULTURAL-HISTORICAL ACTIVITY THEORY MEETS BOURDIEU

I explore conceptions of the use and exchange values of mathematics education from a Cultural-Historical Activity Theory perspective. I draw on Lave and McDermott's study of estranged learning translated from the early Marx, and from Marx's later analyses in *Das Capital*. From the former, one deduces the source of learners' alienation from learning in the enforced conditions of establishment education. I turn to *Das Capital* to find the Marxist/ian analysis of the commodity-enhanced labour power and the field of reproduction. I conclude that the use-value of mathematics education derives from learners' consumption, and from enhanced (mental) labour power. Finally I will discuss Bourdieu's notion of reproduction and capital in the educational field.

Monday 21st November 2011 at 5.00 p.m., Room 205, Mary Allan Building, Hills Road

Dr Tracy Johnson, University of North Carolina, and University of Cambridge

ELEMENTARY PRESERVICE TEACHERS' MATHEMATICAL KNOWLEDGE FOR TEACHING

I shall present a study which examined pre-service teachers' development of mathematical knowledge for teaching (MKT) over their final year in a university-based teacher education program in the southeastern United States. The study design employed a new methodology, termed situated case studies, in which tiered participation resulted in extensive data for three focal pre-service teachers as well as a comparison to larger groups of their peers through interviews, focus groups, written reflections and a quantitative measure. A new protocol for coding elementary pre-service teachers' mathematics lessons was developed to extend Rowland et al.'s (2009) work on the Knowledge Quartet model.

Tea and coffee will be available before each meeting. All are very welcome.

For directions to the Mary Allan Building and any other information, contact Tim Rowland at tr202@cam.ac.uk