

THE SOCIAL CONSTITUTION OF SCHOOL MATHEMATICS CURRICULUMS

Tony Brown

Manchester Metropolitan University, UK

In whose interest are we working when we construct mathematical curriculums for schools? How does mathematics as a discipline lend itself to being categorised within curriculum documentation? Our attempts to describe the world always result in formulations that at best approximate the world we seek to describe. But we are always governed by specific purposes in trying to create such descriptions. Governments, mathematicians, teachers, economists would all have different motivations as to how mathematics should be described. The attempt to describe mathematics in a curriculum inevitably results in a caricature of traditional understandings of mathematics as a discipline. Should this sort of formulation be seen as a simplification, a misunderstanding or as an ideological distortion? The formulation can be viewed variously, for example, as a serious but imperfect attempt to describe mathematics to guide school instruction or as a cynical ploy to make teachers and children more accountable according to a particular institutionalised account of mathematics or a reconfiguration of the discipline itself to meet contemporary needs. Ricoeur (1981) would downplay intent in the construction of the formulation and see it more as a matter of subsequent interpretation, and action on the basis of this, as to how the formulation is viewed.

This presentation will review new work (Brown, 2001) discussing the social construction of mathematics for school instruction and how progress in learning mathematics might be viewed as a function of particular learning theories or evaluation strategies, and the particular characteristics they value. It will also consider strategies for enabling teachers to address such concerns within professional development programmes (Brown and Jones, 2001).

References

- Brown, T. (1997) *Mathematics Education and Language: Interpreting Hermeneutics and Poststructuralism*, Mathematics Education Library Series, Kluwer Academic Publishers, Dordrecht. (2nd ed July 2001, 301pp.)
- Brown, T. and Jones, L. (2001 - in press) *Action Research and Postmodernism: Congruence and Critique*, Open University Press, UK.
- Ricoeur, P. (1981) *Hermeneutics and the Human Sciences*. Cambridge University Press, Cambridge.