

RESEARCHING THE SOCIAL IN MATHEMATICS EDUCATION: ISSUES OF INCLUSION

Co-ordinators: Hilary Povey, Tansy Hardy & Mark Boylan, Sheffield Hallam University, England
Tony Cotton, Nottingham Trent University, England

Mathematics education which seeks to promote inclusion has a number of different but interrelated facets. Firstly, there is the development of a critical content in the curriculum: this seeks to use mathematics as a means to help learners understand the world they live in. Secondly, drawing on some aspects of ethno-mathematics and situated cognition, the informal mathematics practices of various groups in society can be examined. This reminds us that the reality that the accepted curriculum content reflects is that of the dominant cultures and groups in society and is not the only model of mathematics available. More importantly, the gap between these informal mathematics practices and school mathematics helps to reveal the mechanisms by which the mathematics curriculum acts to disadvantage certain groups. Thirdly, building on concepts of communities of practice, we see the development of critical pedagogies that seek to democratise the mathematics classroom.

Against this background, we wish question what it means to conduct research into inclusion in mathematics education. Our inquiry will include the following.

The *choice* of what to research. Choices about what to research are inevitably ethical and political.

Our decisions about what to research ... are, at root, value-based decisions which we expect to have to defend. (Wiliam 2000, p124f)

The *purpose* of research. Whether or not research is critical or promotes inclusion is bound up with its potential to be used in transformative ways. This might be the purpose for which it is intended: could it also be the purpose to which it is put?

The *methodology* of the research. Are there essentially critical research methodologies or can research based on traditional methodologies promote inclusion? Are there types of research questions which can only be addressed through critical research methodologies and that cannot be answered by traditional methodologies?

The *practice* of the research. What can the relationship between/amongst research participants be like? How do different research relationships allow us to uncover different truths?

The discussion group will take as an initial focus a paper dealing with some of these issues.

REFERENCES

Wiliam, Dylan (2000) 'Meanings and consequences of research in mathematics education' in Proceedings of the 2nd International Mathematics Education and Society Conference, Montechoro