

Discussion Group on
Work-related Mathematics Education

(Coordinators: R. Straesser, Univ. of Bielefeld & J. Williams, Univ. of Manchester)

The Discussion Group will continue the discussion begun at PME 23 in 1999 (see the PME News of November 1999, pp.5-7¹) by briefly recalling this activity and then looking into aspects of "Work-related Mathematics Education" not treated at PME 23. An additional reference will be the papers of a one day conference in Manchester in February 2001 on "Maths into Work" (for information on this conference's papers see <http://www.man.ac.uk/CME/conferences/index.htm>).

At PME 25, we start from a dictionary definition of work as "exertion directed to produce or accomplish something, productive or operative activity, employment, a job, esp. that by which one earns a living", and look into the role of mathematics in this type of human activity and the teaching/learning of work related Mathematics - not forgetting activities like "community services". As a salient feature of maths related to work we take the fact that the goal of the activity is *not* to produce or learn mathematics, but to use it for different purposes outside maths.

Keeping in mind that we discussed "current use of maths at the workplace" and "current ways to teach work-related maths" at PME 23, work at PME 25 will focus on three additional issues:

- the role of old and new technologies ("artefacts")
- theoretical perspectives on discourse and activity in work, college and research
- research methodologies.

The importance of artefacts is based on the use of technology (old as in Geometry, charts as in administration, technical languages ... and/or new as computers, software and programming languages) in workplace activities and teaching/learning for it. Discussions in the group should aim at better understanding the contradictory trends of hiding or revealing workplace maths by means of artefacts and discourses, and identify problems and potentials for teaching and learning work related mathematics.

Current research into the use of mathematics at work (with the spectrum from traditional statistics to ethnomethodology) seems to favour case studies in a participatory style, while different ways of "stimulated recall" are also in use. After discussing research perspectives and methodologies, the Discussion Group should decide on the feasibility and necessity of continuing the Discussion Group in future PME conferences and between conferences.

PME-delegates who want to actively participate in the Discussion Group are asked to contact the coordinators via email as soon as possible at rudolf.straesser@uni-bielefeld.de or julian.williams@man.ac.uk

¹ Reference: Hoyles, C., Mathematics in the Workplace Practice Discussion Group. PME News November 1999, pp. 5-7.