

SUMMARY OF WORKING GROUP 3 : OVERCOMING GENDER AND SOCIAL BARRIERS

There were four presentations in this working group. Sharleen Forbes (New Zealand) gave an overview of areas of mathematics shown in the research literature to be possible barriers to the equal performance of girls as compared to boys, and possibly of other social (such as ethnic) groups. These included the area (topic) of mathematics being studied, the context (real-life setting) in which problems were set, the expectations placed on students, their attitudes to mathematics and the way in which their achievement was assessed.'

Levi Genoveva (Spain) discussed the difficulties faced by the Distance Education University in providing mathematics for blind, or partially sighted, students. In particular there is a need for specially-adapted, not merely translated into braille or read aloud, resource materials. This is especially the case when teaching graphical concepts or using 'visual' illustrations.

Farouq Almeqdadi (Jordan) presented his research findings on the use of the Cloze-test to measure the readability of the Jordanian fifth grade mathematics text book. He found that girls scored, on average, higher than boys in this measure but that the overall readability of the textbook was poor. It would be interesting to see this study repeated on other mathematics texts, or in a 'paired-design' with the mathematics text compared to language text, for example.

Federico Lastaria (Italy) reported on a scheme in which a group of volunteers provided mathematics instructions to prisoners. He also discussed the appropriateness of textbooks and other resources for self-learners in extreme situations (in this case high-security imprisonment), and the need for self-teaching texts relevant to the learners own situation.

The ensuing debate centred on the different needs of students imprisoned for criminal and political reasons, of children in prison and of students following imprisonment. The difficulties currently being faced in Palestine to provide education to high numbers of badly injured children were also discussed.

In both working group sessions it became apparent that different countries had different policies for ensuring access to mathematics education for different groups, and that they had different levels of access to specialist and innovative teaching resource materials. It is not common for the availability of resource material (particularly free material) to be put on the web and the working group organisers believe that the establishment of an internet web-site for material resource material would aid international co-operation and collaboration in these areas.