Semiotics and Mathematics Education Working Group

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The theme of this meeting was "applied semiotics" and its role in mathematics education research. There were presentations from two researchers working in the context of semiotic methodologies and perspectives specifically aimed at discussion of the tools and techniques that they were using for their data collection and analysis. Dedrie Cook (Derby) spoke about her work in studying children at play with mathematical artefacts and the tools from linguistics that she had used for analysis of data. Corina Silveira (Southampton) shared her theoretical perspective and research design for analysis of children's development of counting. The work of Dedrie and Corina exemplified the great variety in work that is considered semiotic, and presented two approaches to data collection and design that fit within a semiotic framework.

In the following discussion period the group was asked to consider the following questions, none of which were resolved (of course this was not the intention):

~ Does it make sense to talk about applied semiotics? ~
What toolkits have been used?
~ What toolkits are available?
~ In what sense are existing tools examples of applied semiotics?
~ Can these tools add anything new to our understanding of mathematics teaching and learning? ~
Why adopt a semiotic approach at all?
~ How do we view validity and reliability in this context?

The future of the group was discussed and there was a clear consensus that the group should continue, perhaps in a more focussed way. More use will be made of the mailing list and it was suggested that readings were posted prior to each meeting of the group that will focus the discussion. It was also suggested that the group begin, slowly, a writing project that will bring semiotic ideas to the mathematics teaching community in a practical and accessible way. Perhaps through Mathematics teaching publications. The reading for the next meeting will be decided through the semimath mailing list and published one month prior to the meeting. To subscribe to the mailing list send the following message to maiordomo@sbu.ac.uk: subscribe semimath youremail@wherever.