

Changing the Culture conference 2007 Report from the MFEE workshop

About 30 people from around the province, passionate about the importance of preparing future elementary school teachers to teach mathematics well, attended the workshop. In two hours we managed to address only the beginning of the agenda. This appears to be a very good time to be re-examining the goals and delivery of our MFEE courses!

Caveat: These lists are meant to provide a basis for future discussions. They are not meant to be complete, or to prescribe what should be taught, but they do provide an idea of some of the issues nearest and dearest to the hearts of the workshop participants. Please send us your comments.

Which mathematical concepts are most important to teach future elementary teachers?

We formed small groups and asked each group to identify their top three.

Running through all the rest:

problem solving	logic/reasoning	pattern recognition
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And, in the order the groups spoke:

place value	basic arithmetic operations	understanding symbols
fractions	integers	recreational mathematics
idea of variable	probability & randomness	number theory
modelling	estimation	elementary descriptive statistics
informal geometry	measurement	

“Extra-conceptual issues”:

Each group identified one or two they thought most important.

We would like our students to:

- enjoy math (e.g. through math fairs, math lens, etc)
- develop a sense of wonder about mathematics and an appreciation of its beauty
- “not panic”, i.e. develop a fearless approach to math problems and an ability to take risks
- look for and make connections among various areas within mathematics, and connections to other disciplines
- learn to communicate mathematical ideas using various techniques
- “really get it”, even just once
- see this course as the first step in a lifelong engagement with the subject
- learn to be “comfortable in their own math skin”, i.e. accept their own strengths and weaknesses, and be willing to keep learning
- see mathematics everywhere (e.g. in art, music)
- understand how important practice is to developing mathematical skills
- understand how important patience is to the development of mathematical understanding
- really understand why mathematics is important to their lives and the lives of their future students

And next?

Now appears to be a good time to re-examine the goals, content and delivery of courses concerning mathematics for elementary teachers.

1. Everyone is invited to join the listserv, which we hope will provide a forum for discussion of these and related topics, as well as a way to let people know about upcoming workshops. If you would like to join, please e-mail Geoffrey Salloum at SalloumG@Camosun.bc.ca
2. We plan to set up a space on the website of the mathematics & statistics articulation group (BCcupms) to collect examples of productive approaches and activities.
3. We have started collecting and collating course-related information from the post-secondary institutions in BC. This will give us an idea of what is currently being done, which texts are in use, and what prerequisites are being applied. Watch the listserv.
4. At the May 15-16 meeting of the BCcupms we'll report the results of this workshop and of the November discussions at SFU's Burnaby campus. It might be possible to set up a formal subcommittee concerned with MFEE issues.
5. There will be another workshop on May 17, as part of the professional development activities of the BCcupms.

Thank you, everyone, for a lively and fertile discussion!

-- Malgorzata Dubiel & Susan Milner