Report on the 2011 SFU-PIMS-MITACS Summer Math Camp for Teachers

In June 2011, SFU Department of Mathematics, with the support from PIMS and MITACS, has offered its first Summer Math Camp for Teachers:

http://www.math.sfu.ca/K-12/mathcampstudents/campinfo/teachers_camp http://www.math.sfu.ca/K-12/mathcampteachers

The Camp took place June $27 - 30^{th}$, 2011, with a one-day follow up event on September 1^{st} , 2011. For the Camp schedule, see:

http://www.math.sfu.ca/documents/doc/2011_ScheduleCampTeachers

The Camp gathered 18 participants: 15 teachers and 3 SFU students working towards their teaching degree. The leadership team consisted of John Grant McLoughlin, Faculty of Education, UNB; Melania Alvarez Adem, PIMS; Susan Milner, UFV; and Malgorzata Dubiel, SFU.

The main theme of the camp was "Teaching Through Problem Solving". Camp program included several workshops on problem-solving led by John Grant McLoughlin, and a workshop on assessing problem-solving led by a distinguished Vancouver high school teacher, Fred Harwood, Hugh McRoberts Secondary, Richmond, BC. Two talks by SFU faculty members: Word Problems Through the Ages, by Tom Archibald, and Geometry Through The Ages: a Story of Euclid's 5th Postulate, by Alistair Lachlan, introduced a historical perspective.

The teachers had an opportunity to interact with the students from the SFU Summer Math Camp for Students, which took place at the same time. There were three common presentations, and two problem-solving sessions during which the teachers took a leading role. On Wednesday June 29th in the afternoon, the two camps joined in a Math Mania session organized by Melania Alvarez Adem from PIMS. Since this was an afternoon event, parents were invited; about 5 – 6 participated. On Thursday, June 30th, teachers and students participated in MITACS MathAmaze tournament, lead by Roger Kemp from MITACS. Both events were very successful.

The follow up event on September 1st, 2011, gathered 12 participants. The students and some of the teachers were not able to participate. That event was focused on how to apply the problem solving knowledge, understanding and confidence into everyday teaching.

The Camp registration fee was set at \$50, and waived for the students. It was low as to attract the teachers to this new event.

The camp generated a lot of interest. However, several teachers expressed a regret that, due to the timing of the camp – during BC provincial exams, they were not able to

participate, and suggested that, in the future, the camps should tale place either during the first week of July or the week before the school starts in September.

The feedback we have received during the camp and the follow up event suggests that the participants found the camp to be a very valuable experience. They felt that they had learned a lot and increased their confidence in their problem-solving abilities. In addition, they felt that the contacts they made during the camp, with their fellow teachers and with mathematics faculty members, will be very useful. Teachers and students have also appreciated learning about some of the available resources that could make their teaching more engaging: books, puzzles, Math Mania activities and MathAmaze.