



Editorial

The first issue of MTRJ in 2011 contains two papers in the Section Teaching-Research of MTRJ, which look upon the problem solving from two different angles. The first one, by Jones & Jones looks upon problem solving and its understanding by mathematics teachers through the lens of NCTM standards, whereas the second paper, by Ruili Yes et al discusses the same issue through the Polya's methods of problem solving (How to Solve it?). Whereas the sample of teachers had not taken issues such as "building new mathematics knowledge through problem solving" into account when assessing the degree of problem solving skills required by the sample problems taken from recent Regents exam, the sample of remedial students at Hostos CC revealed a significant weakness at the stage 2 of Polya, the process of planning the solution path, that is exactly where and when the "building new mathematical knowledge" takes place. The discussion by Alice Cunningham of Teaching Remedial Mathematics to Learning-Disabled focuses on especially developed remedial strategies to this, probably the most difficult front for our mathematics teachers profession. These discussions of learning in schools and community colleges' mathematics are supplemented by the report from the College Algebra classes at A&M university in Laredo, Texas, based on the principal belief that students learn mathematics by actually doing it, that is "to understand concepts and problem solving capabilities". It is clear that the subject of problem solving is of concern to mathematics educators along the full educational route of developing individuals. There are many, of course, arguments, which support the development of problem solving skills, but to us the most important is facilitation of independent problem solving, when the problem solver is on his/her own and can rely only on her/his knowledge. That is the route through which our students can become autonomous thinkers.

The Section Reports From the Field contains this time a very original approach to mathematics developed with the help of GIS system designed by James Watson, the librarian at BCC. Scaling in the context of maps, standard technique in Basic Mathematics classes, introduces a venue through which student could see the translation of numbers at the nano-scales to the maps of their neighborhood.