Editorial

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Editorial: Social Justice, Taxicabs and Soap-Operatic Mathematics

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Welcome to the second volume of The Montana Mathematics Enthusiast. I am pleased to report that the journal is growing spectacularly in terms of its geographic reach, in the number of readers as well as the increase in the number of submissions for publication consideration. The external reviewing process has been beneficial to maintain a high standard in the published articles. A special thank you to those of you who selflessy gave of your time for the review process. The web-traffic statistics supplied by Tony Riehl indicate that TMME contributes to nearly half of the traffic to the MCTM webpage. Even more impressive is the fact that the journal pages were accessed from 32 different countries!

In this issue we present an eclectic collection of articles. The first feature article by Seth Braver and colleagues is a critical commentary on Eric Gutstein's (2003) paper published in the Journal for Research in Mathematics Education. Gutstein (2003) presented a compelling argument for the inclusion of social justice concepts in the mathematics curriculum, particularly in classes with minority students. In the spirit of true scholarship six mathematics and mathematics education graduate students (which included practicing public school teachers) debated the ideas presented by Gutstein in this JRME paper. The rich and sometimes controversial discussions led to the commentary presented in this issue. The satirical beginning sets the stage for an in-depth examination of the validity of Gutstein's ideas. Johnny Lott, past president of NCTM, was very kind to preface the commentary by outlining connections with the legislative plank of NCTM. Eric Gutstein expressed joyful surprise at the in-depth analysis of his ideas and contributed a reaction to the commentary.

The second article by Jerry Baty and Virginia McClendon presents an interesting classroom vignette, one that many practicing teachers may have encountered at some point in their careers. The vignette is used to present ideas from action research and its usefulness to conduct investigations into the processes of teaching and learning in the classroom.

Keeping with the mathematics tradition of the journal, the article by Chip Reinhardt focuses on the Taxicab (or the Manhattan) metric and the usefulness of this geometry to investigate real world problems. Reinhardt presents solutions to three real world problems using Taxicab Geometry. Readers are encouraged to judge whether the solutions presented

are in fact the „optimal" solutions and whether an improvement is possible on the solutions offered. The three problems used by Reinhardt are very accessible to high school students.

We conclude this issue with a colorful journey into mathematics history, particularly into the theory of equations which gave rise to modern Abstract Algebra. KaCee Ballou, a local middle school teacher presents the soap-operatic drama behind the solution of the cubic. The main point made by Ballou is for teachers to move beyond the quadratic as the pinnacle of middle school algebra and to expose students to the solution of the cubic via its colorful history. Catherine DeGrandpre, a high school mathematics teacher (at Martha's Vineyard) pushes Ballou's recommendations several steps further and completes the colorful history of the theory of equations by presenting a history and an understandable account of Evariste Galois' brilliant answer to the question of solvability of equations via radicals.

We hope you find the articles of interest. As a sneak preview for the Fall issue (Vol2, no.2), TMME will go international and feature articles from mathematicians and mathematics education researchers worldwide. In keeping with Montana traditions, the journal will strive to regularly feature articles from Montana teachers and teacher educators.

Last but not least, the journal expresses its appreciation to the authors in this issue for contributing thought provoking articles for the readers of the journal. As usual offers for reviewing manuscripts as well as book reviews are welcomed.
Thank you for your interest and continued support.

References

Gutstein, Eric. "Teaching and Learning Mathematics for Social Justice in an Urban, Latino School," Journal *of Research in Mathematics Education* 34 (January 2003): 37-73.