EDITORIAL _____

Direction

A new school year offers an opportunity for increased involvement in your professional organization.

- Plan to attend the NCTM Canadian Regional Conference. Bring a friend.
- Plan to contribute to your *journal*. The themes of the next two issues are "Problem Solving in the Junior High School" and "Technology in Mathematics Education." Anticipated publishing dates are February and May, respectively.
- Plan to have your students submit solutions to the Student Problem Corner.
- Plan to contribute, or encourage your colleagues to contribute, to the special publications your executive has authorized. A special issue, "Mathematics and Early Childhood Education," is planned, as well as a monograph, "Make It and Take It."
- Plan to renew your membership in MCATA, and to encourage a colleague to become a member.

Comment

The focus of this issue is "Effective Teaching of Mathematics," and there are many factors contributing to this topic. Knowledge of mathematics and how mathematics ideas and concepts develop is a factor. Knowledge of how children learn mathematics – and use of that knowledge – is also a part of effective teaching. Is mathematics a set of rules, cases, and procedures, or is it a thought system that utilizes a particular structure? Research on the subject of teaching effectiveness abounds. Do effective teachers of mathematics incorporate into their lessons this research on teaching strategies and classroom management, as well as the results of research on teaching and thinking and the use of technology? Effective teaching might also include student involvement, student accomplishments, and student use of mathematics.

The Minnesota Department of Education and Minnesota Council of Teachers of Mathematics investigate what mathematics teachers may do to teach thinking skills, as well as mathematics. **Sol Sigurdson** examines learning theories and proposes a "constructivist" view toward learning principles and their implementation. **Dr. Ediger** examines the scope of the mathematics curriculum and, in particular, the role of the textbook. **John Heuver** makes a critical analysis of some of the texts used in Alberta. **H. Skolrood and M.J. Maas** show parallelism in the reading process in mathematics and social studies, and identify four reading situations. **Professor Schrage and Dr. Jerry Becker** identify three limitations in the use of microcomputers for teaching mathematics. Dr. Duncan and Dr. Litwiller examine a multiplication table, and interesting matrices are the result. **S. Jervis**, a Grade 12 student, discusses infinity. Craig Loewen illustrates the effective use of the overhead projector in teaching geometry. **Jacqueline Fischer** shares ideas on creative problem solving, and **Oscar Schaaf** provides a geometry lesson that is especially appropriate for teaching problem solving. **Hank Boer** is the contributor to the Student Problem Corner.

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