historical novel. Called the "Morning Star of the Reformation" because he preceded the actual Reformation period, Wycliffe is primarily remembered for his English translation of the Bible, which became the best translation of the Scriptures into English for a century before William Tyndale's time.

The story is replete with historical facts and figures, interspersed with a few fictional characters representative of those who would likely have lived at this time. It is told from the point of view of one of these fictional characters, one William Ayleton, then ninety years of age. A "contemporary" of Wycliffe, he looks back at the wonderful events God has used to bring the written Word to high, and low-born, Englishmen through His instrument, John Wycliffe, among others.

From the dusty road joining Leicester to Oxford and the University that was the cradle of the Reformation in England, one follows the young fourteenth century scholar through plague and political and religious turmoil which shaped his life and paved the way for the events of the Reformation in the next century.

This book is fascinating reading: exciting, enlightening, and encouraging for adolescent readers who struggle with their own spiritual battles. The publisher's note preceding the story expresses hope that the reader may be challenged by the story of "an intrepid and brilliant man challenged to treasure the Word and feed upon it for himself." Every home should own a copy of this. ■□■

from the TEACHERS' LOUNGE

One of the worthwhile projects funded recently by the Federation of Protestant Reformed School Societies was Mr. Vern Huber's research in and writing concerning the history and philosophy of mathematics from a Christian perspective. Mr. Huber, the chairman of the mathematics department at Covenant Christian High School in Grand Rapids, has long been a mathematics scholar. And what he submitted to the Federation, after some additional, intensive study, was indeed scholarly work. In the nature of the case, one cannot expect to pick up the 53-page

booklet and practice on it his speed reading skills. A thoughtful reader, however, will be brought to a better understanding of what mathematics is all about – even if some of the mathematical concepts presented are beyond his ken.

We commend Mr. Huber heartily for his work, and encourage him also to take up his pen again and provide for this first work a sequel, dealing more specifically with the application of the principles of mathematics to the teaching of it. The last several pages of the little book provide, perhaps, a hint of good things to come. We quote them here, partly in order to give to our readers a little taste of what the Federation is doing for our teachers, and partly because Mr. Huber's closing comments are very thought-provoking. What follows, then, is an excerpt from:

MATHEMATICS

An Overview of its History and Philosophy From a Christian Perspective

Vern Huber

It is not our purpose here to discuss particulars of mathematics instruction. However, a few observations are given for the reader's consideration.

The teacher's role is most often viewed as one in which he "tells" students how to perform various mathematical functions. Such instruction boils down to demonstrating, often in a mechanical way, various techniques which will enable the student to do most of the next day's assignment. This is a very efficient method of teaching if our goal is simply to prepare the student to do a selected list of problems for the following day. In the short run, this method gets an A for efficiency; it might even get an A+ if the list includes some review problems that remind the student of mechanics learned in previous assignments. Another attractive feature of this approach is that it requires less effort on the part of the teacher and student alike. The problem here is that our students have limited memories, just as we do. Long lists of isolated tricks cannot be retained, no matter how often they are reviewed. Some who have extraordinary memories, or who are particularly studious, may proceed happily through most of elementary and high school mathematics before frustration sets in.

We recognize the need to learn the mechanics of mathematics. We would even grant that mathematics cannot be understood if mechanics are not learned. We realize, too, that learning requires a certain amount of rote drill. However, we maintain that if learning mechanics through rote drill is the goal, then we have not taught mathematics, nor has the student learned mathematics.

We propose that, in order to make any meaningful mathematical response to God's creation, we must understand mathematical concepts. This provides us with a goal in our instruction. In order to accomplish this goal, we must first of all teach the necessary mechanics. In addition to this, meaning must be given to mathematical processes so that students learn concepts and relationships between those concepts. This is not a simple task; it requires more effort on the part of the teacher and the student.

In order to accomplish this, we suggest that mathematics be taught from a historical perspective. By this we do not necessarily mean that the teacher reveal names and dates and other details of the historical setting of a given concept, though such information should be included whenever possible. Teaching from a historical perspective requires first of all that we show how a concept or process is developed and, whenever possible, explain relationships between various concepts and processes.

Instruction of this type would necessarily be interactive. We suggest the following general approach.

Initially, the teacher would be responsible for developing and explaining the concept at the students' level of understanding. The student would then be required to respond by constructing his understanding of the concept. This would be followed by a period of reflection in which the student would attempt to determine if his construct coincides with that of the teacher. Finally, the teacher and student would together make a judgment concerning the adequacy of the student's construction of the concept. This may result in some alterations in the student's construct, and further reflection by the student. In summary, this approach requires the teacher initially to explain a concept. The student then constructs, and in concert with the teacher reconstructs, his understanding of the concept until both the student and the teacher are satisfied with the student's level of understanding.

Our students should have an awareness of the fact that the mathematics that they see in their textbooks is the result of individual and combined effort of

mathematicians throughout history, and that there were many mistakes made along the way. It is important for students to realize that even the greatest and most powerful intellects in mathematics have made errors. This is necessary, we believe, since many students fear mathematics because they have the mistaken notion that mathematics is infallible, and the people who do mathematics never err.

We have rejected the Platonist's philosophy of mathematics, yet we often teach as Platonists, and therefore students see mathematics from a Platonist's view — as a body of knowledge, perfect and polished, residing in textbooks. It appears to them to have existence entirely apart from any human input. Eventually they learn that this is not the case, but first impressions die hard.

The idea of the conceptual approach to teaching mathematics is not new. Most mathematics teachers agree with this ideal. Many, however, feel that this ideal is unattainable. There are several reasons for this. In the first place, teaching concepts requires more effort on the part of the teachers. Secondly, students resist learning concepts. And finally, most teachers assume that the conceptual approach requires more time than is available.

We agree that more effort is required. But for teachers who have a thorough knowledge of mathematics, the extra effort should be both enjoyable and rewarding. Students' resistance would cease if teachers at all levels were consistent in using the conceptual approach. Teaching conceptually need not require more time. The ideal that we have presented can be realized. However, it would require a higher level of intensity and devotion on the part of teachers and students.

If this approach is not used, our students, or to make this more personal, our covenant young people, end up holding the bag. And in that bag are innumerable, isolated tricks and devices used to complete assignments. The contents of this bag may represent a kind of mathematics, but it is not the mathematics that satisfies our Christian philosophy nor our Christian commitment to learning. ■□■

We hear also, this time, from the teachers' lounge in Doon — which has long been a good source. Mr. Hunter is the principal there, and the article on computers is one which he used also as an informational note to the parents. Mrs. Hunter was a primary grade teacher in Doon at the time she wrote the article on the teaching of writing to little ones. Now she has a child of her own