

## EDITORIAL

### A New Senior High Mathematics Curriculum?

*The editors take no credit for having initiated the thoughts presented in this article, but for what they are worth we pass them along as we understand them. We are not in a position to identify the originators of the proposals; we can only assure you that "important people" are thinking about them.*

There appears to be a great deal of concern in Alberta at the moment about the content of the senior high school mathematics curriculum. Next year the new authorizations come into effect in Mathematics 30. In the following year we will see a change in Mathematics 31 along the lines of calculus, linear algebra or probability. Also in this same year, students will be coming from the new junior high school programs into Grade X and it is possible, if not probable, that the senior high school programs will need to be revamped for these students. All this indicates that not all of the problems of the new mathematics are behind us yet.

As if we have not enough problems already, we have been hearing rumors of a proposed change, not in the content but in the structure of the Alberta mathematics curriculum. The plan consists of three programs.

A. Three-year Academic Program for students in the top 40 percent group of the Grade X class. Most of these students will prepare themselves for entrance into university or technical school. The most important factor is that these students demonstrate talent in mathematics. The sequence would be as shown by the diagram.



Certain students may be advised or required to take Mathematics 31 in addition to the above.

B. Four-year Academic Program for the medium 35 percent of the Grade X mathematics students. This program would be identical to Program A with the exception that it would require four years rather than three to complete it. The final year would again involve a choice of Mathematics 30 or Mathematics 32, and possibly Mathematics 31 for some. The students enrolled in this program would be selected solely on the basis of their performance in mathematics, not on their occupational choices. It is presumed that many of the students would go on to the unarticulated technologies, apprenticeships or certain areas in universities.

C. General Mathematics Program for students in the remaining 25 percent of the Grade X class. This program would provide a common mathematics course only in Grade X, and many of the students would not study mathematics beyond this level. In Grade XI there would be special courses for business education and some of the apprenticeship areas.

Editors' Comments: The above proposal has the basic theme that 75 percent of the students will study the same mathematics, some for three years and some for four years. This demands, then, a course that is potentially of benefit to 75 percent of those entering senior high school. Can such a course be designed? Many think it can; some think it cannot.

Another assumption is that the difference between "good" and "average" students can be provided for by spending a longer time on the same material. Is this reasonable? If so, should the length of the mathematics course for "average" students be four years and for the "good" three years? Some observers feel that three years should be the allotment for the "average" and less time for the better students.

The most important point in the proposal is that decisions are to be made on the basis of mathematical talent, not vocational choice. Is there any merit in the scheme? Some people, including the editors of this *Newsletter*, think there is. What are your opinions?