

Editor's Note: I publish in its entirety the following report of a survey and ask the reader: (1) Are the questions loaded? (2) Is the sampling limited; if so, to what extent do the limitations affect the conclusions? (3) Do the implications, as contained in the last two paragraphs, lack validity?

A survey has just been conducted at the University of Alberta, Calgary, with a view to determining the effectiveness, or otherwise, of the high school program in mathematics. The figures given below are percentage replies to the indicated questions; they incorporate the replies of 114 (virtually all) UAC students whose major subject is mathematics and who took Grades XI and XII in Alberta. Replies from other students are excluded from the figures. Among the questions and answers were:

Question One: Do you feel that the study habits developed in high school form an adequate basis for the study habits necessary at university?

Answer: Inadequate - 75%, adequate - 19%, good - 6%.

Question Two: Do you consider that a potential university student could profitably cover more material in Grades XI and XII in your field of specialization? If so, how much more?

Answer: No more - 18%, zero to twenty per cent more - 54%, more than twenty per cent more - 28%.

Question Three: On the average, in Grades XI and XII, () written exercises per year were in my present major field and were corrected and returned to me.

Answer: Disregarding the non-numerical answers like "several", "too few", etc., there were 82 numerical answers of which 21 per cent indicated that the number of written exercises per year was zero. There were also a few replies in the neighborhood of 100. However, the allegation that there are gross inequalities in the Alberta school system has - the Minister assures us - "no basis in fact". (Calgary Herald 26/2/1965).

There were other questions and answers on the survey, but these did not appear to exhibit any very conspicuous trend. On the whole, the members of the teaching profession did not incur serious criticism, although the adequacy of their mathematical training was occasionally questioned. Questions One and Two

appear to be an indictment of our administrators and syllabus-makers, Question Three reflects upon the inspectors (if any).

In considering these results it must be borne in mind that the survey was confined to a restricted class of individuals - university students of mathematics. These people are of well above average intelligence and it may be that some of their views (e.g., concerning enrichment of the syllabus, Question Two) are not directly applicable on a universal basis. Nevertheless, the survey does indicate that the more intelligent students are not learning as much as they could and should learn in high school. This is improvident. The situation may soon arise in which Alberta needs its best brains far more than the best brains need Alberta. The time will come when Albertans must live by their talents, not by their oil revenues. Although the survey was for convenience, confined to mathematicians, the problem is undoubtedly much broader. There is evidence to believe that a similar survey conducted in the physics or English departments would yield a similar result. There is no reason why this province should not have the best educational system on the continent. We have the money and the facilities, and the target is not all that high.

But we can't be bothered.