

DEAR FRUSTRATED TEACHER,

Educators in Alberta are being faced with a new kind of freedom and, consequently, must be prepared to accept the accompanying responsibility. I, too, heard the rumors, read the handbook and fearfully felt I was being launched into an unfamiliar orbit. Openly I asked, "What is this academic option? How will it affect the existing program? Where will I find a curriculum and texts?" Secretly I wondered if I had the courage to free my students to explore any mathematical world that seemed inviting to them. Could I provide the necessary stimulation and environment?

The first glimpse of this new horizon was a little frightening, but by looking at the broader spectrum I began to see the opportunities provided by the option. Now we could explore a whole galaxy of topics as well as experiment with new techniques.

Initially I felt I must do some serious thinking about the purpose of offering a mathematics option or, for that matter, of teaching mathematics at all. Students of today will not find society as we know it. We must try to produce capable citizens for tomorrow - citizens who can live in a highly mechanistic, rapidly changing, increasingly demanding world. The brief period they spend in school can serve only as a primary launch vehicle for projecting them into an increasingly complex society. As teachers we must bear our share of the responsibility to help them reach this destination.

This sounds great, doesn't it? Now I should offer some ideas. Recently I had the opportunity of attending the NCTM Annual Meeting in Minneapolis. Of the many worthwhile sessions attended, those that illustrated the changing techniques and philosophy of teaching mathematics seemed to generate the most enthusiasm. Just to gain admittance to any of the sessions led by Dr. Viggo Hansen or Miss Edith Biggs was no small undertaking!

Dr. Hansen, San Fernando Valley State College, Northridge, California, discussed the steps in planning, developing and funding a multicomponent mathematics laboratory. Those of us who were fortunate enough to get into this session were able to participate in a simulated math lab situation. Slides of operational labs revealed happy, enthusiastic children actually enjoying mathematics.

Here was a practical idea. The cost would be minimal and the approach would be different. If students enjoy it as much as we did, your problem as a teacher will be to get them to leave at the end of a period.

The best news of all is that Dr. Hansen has accepted an invitation to speak to Alberta teachers this fall. He will be attending the Annual Meeting of the Mathematics Council in Edmonton, September 26 and 27. I plan to hear him again and hope to see you there.

Miss Edith Biggs, Her Majesty's Inspector of Schools, London, England, led three sessions. Miss Biggs emphasized the new approach to mathematics beautifully by her opening statement that mathematics is like a kiss - one couldn't really judge its merits until one has participated in it. *Participate* is certainly the key word!

Interpreting and recording statistical data was the topic of one session. Such fascinating questions as "How do you compare to an elephant?" and "Are you a Square?" proved to contain some interesting mathematics. Two thoughts struck me as we worked with these problems: first, how stilted we all had become from so many years of being passive receivers rather than active participants; secondly, what a wealth of ideas emerged as we, participants in the lab, gradually became so involved that we forgot our fears of appearing ridiculous or being wrong.

Unless you had the opportunity to attend some of these sessions, a detailed description would be of little value. However, there is an open invitation to enjoy the previously mentioned session along with many others. Your admittance depends on your ability to beg, buy or borrow a copy of *Freedom to Learn*. Addison-Wesley (Canada) Ltd. publishes the book and the authors are - you guessed it: Edith Biggs and James MacLean (the latter is Assistant Superintendent of Curriculum, Ontario Department of Education). Do you recall the 1968 MCATA Conference in Red Deer? Perhaps you were among those who heard Mr. MacLean speak on this topic.

Whether or not you heard either of the authors speak, I know you will enjoy *Freedom to Learn*. I hope my excitement over these two sessions has at least pricked your curiosity.

Sincerely,

Bernice Andersen

Mrs. Andersen, secretary of MCATA, is mathematics consultant with the Secondary Department of the Calgary School Board.

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The *Journal of Experimental Education*, Fall, 1968, contains a reprint of the book *Research and Development Toward the Improvement of Education*. The issue is divided into five parts: Conditions and Processes of Learning, Subject Matter, Content and Sequence, Instructional Methods and Teacher Behavior, and the Current Scene. Of particular interest to the mathematics teachers are Chapter 5, "Curriculum Research in Mathematics", by E.G. Begle; "Strategies for Concept Attainment in Mathematics", by M.F. Roszkopf; and "Socrates, A Computer Based Instructional System in Theory and Research", by L.M. Stolurow.