

A COURSE IN NEW MATHEMATICS
FOR
THE PARENTS IN BROOKFIELD, CONNECTICUT

AN ABSTRACT OF
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by
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Public school education in the nineteen sixties was severely jolted by that revolution called New Mathematics. Even though the changes in mathematics education were long overdue, many schools found the transition a trying time. Difficulties experienced by a school system were usually proportional to the speed and extent to which the curriculum was revised. When the changes were supplementary, limited to enrichment topics, they were accepted with a minimum of problems. When the changes were more fundamental and comprehensive, the reactions of students, teachers, and parents were varied and often acute. In general these new programs, which the mathematics educators greeted with eager enthusiasm, were regarded by the students with cautious interest, by the classroom teacher with concern, even skepticism, and by the parent with a mixture of what was close to frustration and despair. The administration's goal, the successful assimilation of new mathematics into the elementary curriculum, was complicated by these pressures and related problems. Readiness, for students, teachers, and parents, seemed to be the key.

It is with the readiness of this last group, the parents, that this thesis is concerned. The administration of Brookfield, Connecticut, concluded that an attempt to educate

and reassure the parents was advisable. It was felt that ". . . it makes good sense to familiarize them with the latest curriculum developments. They are voters as well as parents and a school should never take its public relations for granted."¹ Consequently "Contemporary Mathematics for Parents," a nine-week course, was commissioned by the administration, sponsored by the PTA, planned and taught by the author to approximately one hundred Brookfield parents in the spring of 1965.

This thesis includes a more detailed explication of the interplay of these causative pressures and problems. In addition it traces the development of the adult education movement and explores the background of the twentieth century evolution in mathematics education. For contrast and comparison, the courses in new mathematics offered to the parents of four other communities across the country are described. These studies provide a deeper insight into realistic goals and techniques of parent education.

The planning and organization of Brookfield's course is explored. Its goals and philosophy are outlined. The format and mechanics are explained. An overview of the course is included, and one lecture, Geometry, is described in detail to illustrate and give substance to the approach and methods of new mathematics.

¹Joseph Green, Editor's Note, Clearing House, XXXVIII (April, 1964), 457.

Since Brookfield's objectives in offering "Contemporary Mathematics for Parents" encompassed the administration and teachers as well as the parents, this thesis attempts to informally evaluate the program from each point of view. Three questionnaires were prepared. One was designed to assess the background and motivation of the parents who attended the lectures. A second was tailored to gauge the effectiveness of the course and its subsequent satisfaction to the parents. A third questionnaire was completed by those teachers who were on the staff in Brookfield when new mathematics was first introduced. They were asked to estimate the effectiveness of the course for parents toward attaining parental acceptance of the revised curriculum. Replies to these questionnaires are summarized, and wherever feasible, the results are tabulated. In addition, Brookfield's Superintendent of Schools, Arthur T. Nelson, was asked for an opinion of the effectiveness of the course from his point of view. In general the reactions of each group were positive. The teachers were the least explicit, although in no case was the course considered a detriment.

The summary of the thesis includes suggestions for improving and strengthening the course. Special emphasis is placed on the potential of parent education in developing interest and support for a school's programs.

It must be added that all evaluative statements are subjective rather than objective. The informality and fluidity

that were deliberately built into the course preclude any statistical analysis. As is true with most parent education programs, ultimate success is not so much the mastery of knowledge as it is a matter of aroused interest, awakened concern, and deepened understanding.