

THE REVOLUTION IN SCHOOL MATHEMATICS
AND ITS EFFECTS ON MATHEMATICS
IN THE WASHINGTON, CONNECTICUT SCHOOLS

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A report by the Commission on Mathematics, begun in 1955, has been partly responsible for a revolution in the field of mathematics. Changes have occurred that have had a very definite effect on the teaching of mathematics. Numerous changes have come from the many writing groups who began work shortly after the Commission made its initial report. All of these groups were intent on improving the mathematics curriculum. Some of the better known writing groups were the School Mathematics Study Group, The greater Cleveland Group and The Madison Group.

A comparison between what these groups offer and those of the more traditional types of program still used in many school today, shows that with the new math there is, as claimed by the writers, nothing new in the material but everything new about the way it is presented. The timing, the vocabulary, the mathematical procedure--all of these have changed. The new programs all claim that they are not teaching separate blocks of mathematics through rote memorization, instead the teaching is to be through a continual study of structures, patterns and relationships.

Attention drawn to some of the changes that have contributed to what is going on in mathematics today shows that mathematics teachers are experiencing many new

demands. But the theory is put forth that shocking as the demands may seem on first encounter, the procedure of meeting and answering them is a maturing one that promises gratifying returns for serious efforts.

Other causes of this revolution are found to be: (1) research in mathematics, (2) automation, (3) automatic digital computers, (4) the change in the relationship between mathematics and science. All of these have led directly and indirectly to the revolution that parents, teachers, students and administrators are experiencing.

In illustrating the changes occurring, attention directed to the effects of the change on the mathematics program in the Washington, Connecticut public schools showed some of the problems faced by all concerned. The four major problem areas here were: (1) recognition by the staff of the need for a new mathematics program, (2) selection of a new program, (3) selection of students for the program, (4) evaluation of the new program.

In summary, the conclusion is drawn that the effects of the revolution is producing desirable results. Recommendations made concern not the actual program but rather the mechanics of keeping the program going successfully. Covered are: (1) the need for a good evaluation of the program yearly, (2) the need for an in-service institute training program, (3) the need of having definite goals for a program and of having more definite criteria for selection of students for the new program.