INDUSTRIAL ARTS

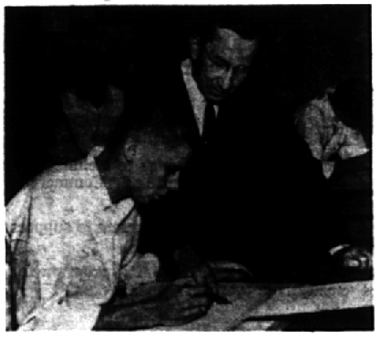
The industrial arts taught in the Birmingham district permits boys to acquire skills in the use of hand and power tools in woodworking and metal working. In addition, courses in drafting assist the student in planning shop projects and reading blue prints accurately. A printing shop at Seaholm gives basic experience in job printing, layout, and the operation of presses and multilith equipment. While the industrial arts curriculum is not oriented toward vocational training, a three-year auto mechanics course supported in part by federal funds gives a limited number of boys an occupational skill.

Auto mechanics is taught as a vocational course at Seaholm High School. In addition to his work in the shop, each student must take shop mechanics and general physics. His English and social studies courses round out his program.

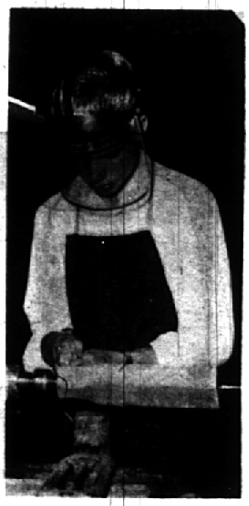
Curriculum

Industrial arts, grades 7, 8 and 9. These courses are exploratory in nature and emphasize the proper use of hand tools and power equipment.

Auto mechanics
Machine shop
Mechanical drawing
Printing
Wood shop



Drafting is a popular course among aspiring engineers at the senior high school level. The essentials of drafting are first introduced in the seventh grade shop course.



The use of power equipment supplements training in the use of hand tools in wood shop. Safety practices are stressed.

Improvements

1961-62:

Change of eighth grade industrial arts from a required to an elective subject.

Electricity will no longer be taught as a part of the industrial arts junior high school course. This will avoid duplication of work offered in general session.

Complete revision of all junior high school course outlines.

Needs

Courses designed specifically for the college-bound student.

Development of a cooperative work-study program.

Half-time coordinator for program development and supervision in the several secondary schools.

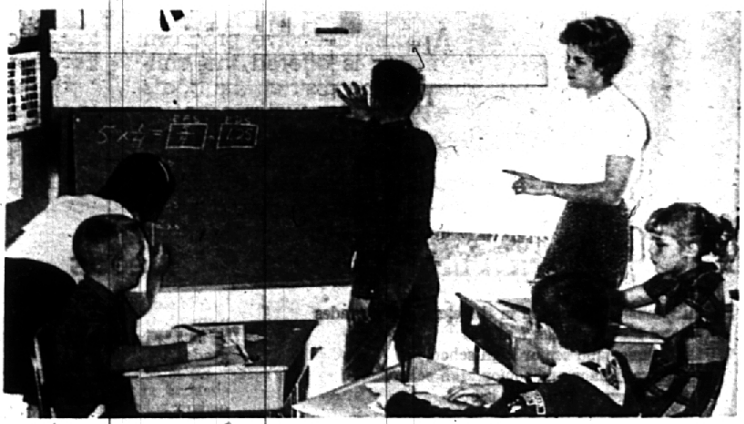
MATHEMATICS

Mathematics is rapidly changing in emphasis and content. Spurred by several national mathematics projects, public schools have been encouraged to try new approaches to instruction. While the change has been felt most at the junior and senior high school levels, such projects are turning toward complete revision of the upper elementary arithmetic curriculum.

Curriculum

The elementary school develops arithmetic skills at each grade level.

Arithmetic, grades 7 and 8
Arithmetic, grade 7 (accelerated)
Algebra I (regular and accelerated)
Algebra II (regular and accelerated)
College Algebra
Plane Geometry
Plane and Solid Geometry (honors sections)
Shop Mathematics
Trigonometry



Solving problems with understanding is emphasized in the arithmetic program. Arithmetic in the schools has received much attention, and an accelerated program is being used. Continual evaluation of the program is being carried on, and careful consideration is being given to new programs as they become available.

Sometimes mathematical concepts are best taught by developing models, or using concrete examples. Study aids, like these sticks help to illustrate that corresponding angles are equal. This is much easier than trying to understand the proof in a textbook.

Improvements

1961-62:

Development and implementation of a course outline for the study of measurement and geometry in the intermediate grades.

Intensive in-service training of elementary teachers in modern mathematics.

Pilot projects in junior high school mathematics using Secondary Mathematics Study Group course of study.

Needs

Employment of a system coordinator of mathematics to assist in program development at all grade levels.

Review of pilot project in junior high school mathematics for purposes of adoption and possible implications for changes in senior high school mathematics emphasis.

Introduction in 1962 of analytical geometry and calculus for advanced students.

Adding of a course in probability and statistics at the twelfth grade level.