

2768 ECONOMIC OPPORTUNITY ACT AMENDMENTS OF 1967

A very few—an articulate few—are beginning to talk seriously about vocational training from kindergarten through adulthood.

Those who talk about combining vocational, technical, and academic education all though the entire school program have a name for this—the organic curriculum. These innovators want no part of fragmented learning. They don't want divisions between manual and literary skills.

In the words of Robert M. Morgan and David S. Bushnell of the United States Office of Education:

"Unfortunately, much of what is now taught in our public schools fails to recognize that technology is generating profound changes in the nature of work. The tendency in the past to separate general and vocational education has penalized both those who are college-bound and those who plan to terminate their formal education at the end of high school or junior college.

"The academically oriented students are directed to those college-preparatory programs which will enhance their performance on the college-entrance exams. They have little opportunity to acquire a knowledge of the functioning of the business and industrial community.

"At the same time, vocational students receive too little opportunity to develop competence in the basic learning skills which they must have if they are to cope adequately with present-day society."

CURRICULUM MODIFIED

At the Nova Schools, Fort Lauderdale's world-famous innovative public schools for Grades 1-12, a modified organic curriculum is already in effect with considerably more to come. For example, the Nova Elementary School contains a practical arts room which was designed by Warren Smith, Nova's supervisor of technical education.

The practical-arts room is manned by a vocational educator—a teacher skilled in the use of power equipment, simple tools, arts and crafts techniques. Equipment includes jig saws, lathes, carpentry tools, a small printing press, washer, dryer, refrigerator, child-height electric stoves, work benches, vises, simple electronic testing equipment, clay, wood, plaster of Paris, metal, water.

Even the youngest children come to the room for work on projects. They come in small and large groups, singly, with and without a homeroom teacher, and grow remarkably familiar with basic manual skills.

While I was there, the youngest pupils were constructing models of famous dams. They had cut out the plywood boards they were using, painted the surface, designed a landscape from available materials, used reference books in the library to see the differences in the constructions of dams, and built their own out of soft wood.

WIDE VARIETY OFFERED

Mr. Smith also has the elementary-school library stocked with vocationally oriented books. The children not only read about the friendly policeman but the contented carpenter, happy mason, clever architect, careful electrician, and so forth.

Reading assignments in the lower grades include basic blueprint reading, and arithmetic lessons often require practical applications through model building or planning.

With the coming school year, Nova's 7th to 12th graders will be required to elect at least one technical-science course each year of high school in addition to a full program of science, social studies, English, mathematics, and foreign language. This wide variety of courses is possible not only because Nova High School has modular scheduling but because more than half the students at any given time are working on individual projects.

The flexible scheduling, with each student responsible for his own program, combined with extensive use of programmed texts, direct teaching by TV, and computer-assisted instruction makes it possible for Nova students to combine academic and vocational education at their own literary and manual-skill levels.

Achievement in the technical and vocational skills, Mr. Smith explained, will be measured by competency and not by time spent in class.

All 7th-year Nova students will be required to take a course called visual communications. Occupational skills to be learned in that program include: perspective drawing, isometric drawing, orthographic projections, and scale drawings. The 8th-year students must all learn to type; to operate keyboard equipment, drafting equipment, and electronic testing equipment.