This description of the DeKalb Area Technical School near Clarkston, Georgia, serves as a guide on methods of developing curriculums and facilities for such schools. The classrooms, laboratories, and shops are described with photographic illustrations of the course offerings to daytime and nighttime students. The necessity to tailor vocational course offerings and facilities to the employment needs of local industry is pointed out as well as the need for flexible facilities to anticipate the rapidly changing employment needs of a technologically dynamic society. The Milwaukee, Wisconsin Vocational-Technical and Adult School enrolling 38,000 students per annum is also described as offering—(1) a continuation school for dropouts, (2) an adult high school, (3) apprentice school, (4) Institute of Technology awarding associate of arts degrees, and (5) the adult school enrolling the largest percentage of students. The author stresses flexible, multi-purpose facilities with extensive use of audiovisual aids and TV instructional facilities. Particular mention is made of parking, food service and handicapped student facilities designed with the adult, employed student population in mind. (RLP)
AREA VOCATIONAL SCHOOLS

By MICHAEL RUSSO

Just outside Clarkston, Georgia, a few miles from Atlanta, sits a $1.4 million dollar complex of buildings that is shaping the future and changing the past for some 1,500 people each year.

Every day of the school year 600 students from a six-county area pour into the four huge buildings—floor space to equal three football fields—to receive education in an extremely wide range of vocational subjects. With the training they are getting they are assured of a good job after graduation.

In the evening the flat expanses of glass blaze with light as some 850 adults attend classes designed to retrain them for new occupations. Victims of technological change or a poor start in education, these people are changing their past and, like their teenage counterparts who go to school during the day, building for the future.

The massive complex of buildings is the DeKalb Area Technical School, just one of 331 area vocational schools built or under construction in 41 States with the aid of Federal funds.

Vocational high schools have been very much a part of the American scene for decades. By the middle of this century, good vocational high schools existed in many parts of the country. Some of them, however, were restricted in their facilities, operating funds, and curriculum offerings. Since the close of World War II many of the tools and techniques of industry, to which most vocational schools were geared, have become obsolete. And an ever-growing army of young people and adults have needed up-to-date technological training and retraining to meet the constantly changing needs of industry.

The Vocational Education Act of 1963 is helping to solve some of the problems created by these circumstances and conditions. Under this act, Federal grants to States are available for construction of vocational-technical facilities to cover up to 50 percent of the costs.

Funds allocated to the States can be used to “improve, maintain, and extend” the facilities of existing vocational schools or to build new area vocational schools in other geographic areas.

The DeKalb Area Technical School in Georgia is a fine example of what the Congress had in mind. Established jointly by the DeKalb County Board of Education and the Georgia Department of Education, this school offers courses in twenty occupational fields and covers the chief vocational interests of a six-county area.

DeKalb offers courses in data processing and in electrical, electronic, chemical, and mechanical technology. If a student is interested in office occupations he may choose accounting, punch-card accounting, secretarial science, or clerical studies. For the aspiring tradesman DeKalb offers appliance repair, auto mechanics, drafting, electrical construction, machine-shop operations, radio and television servicing, welding, refrigeration, practical nursing, and medical assistant training.

That’s the DeKalb vocational menu. But how is the instruction served? Thirty-four full-time and forty-eight part-time instructors form the faculty. DeKalb operates with separate day and night staffs, though eight of the day staff also teach six hours in the evening.

The physical layout of DeKalb consists of fourteen classrooms (too few already), a mechanical-technical section containing nine machine shops, and an automotive and diesel area containing...
four major shops. Four laboratories are set aside for electrical/electronics training, including a separate one for radio-television.

At this writing more than $80 million has been expended in Federal funds by the States for area vocational educational facilities to serve all age groups with programs below the professional level.

The plant also includes three chemistry labs, one physics lab, five office occupation labs (including data processing), and five for health occupation studies. All courses share four drafting rooms.

DeKalb operates a closed-circuit TV system, provides a library reference section for each of the major curriculum divisions, and operates a clinic for remedial reading. These up-to-date instructional facilities are typical of many area vocational schools.

Naturally, technical curriculums of area vocational high school vary from community to community. For example, in Staples, Minnesota—a center for manufacture of heavy earth-moving machinery and farm equipment—the emphasis in vocational training is just where it belongs, on the operation and maintenance of heavy machinery. Young men learn the “in-nards” of bulldozers, cranes, and plows. The graduates of the Staples school get good jobs in local plants or in the construction trades.

But an area vocational school is not an unchanging technological mechanism. It anticipates changes in the industries of the area. Moving to meet new local demands requires school administrators to anticipate rather than to react later to new facts of life in area industry. Schools must plan, therefore, with a degree of built-in flexibility.

Flexibility is the big feature of the large Atlanta Area Vocational School now under construction. Total flexibility. Except for corridors and a few necessarily fixed units, almost everything under the roof will be movable. There will be numerous electrical outlets to supply enough power for any conceivable need. With so many mobile walls, the Atlanta Area Vocational School will be something of a quick change artist.

The school has additional functional features. For instance, the auto shop and other heavy equipment areas that need access to roads and the outdoors are placed on the periphery of the buildings, with adjacent apron spaces for outside work.

This Atlanta school will have an attractive and pleasant appearance. Service areas have been planned and landscaped so that they are hidden from view. Though the school has ample parking, the landscaped parking lots will add to rather than detract from the dignity of the building.

The architectural plan has provided two interior courts open to the sky. Artistic landscaping and lighting will complete the courtyard decor. Students will have not only a place to take a breather, but also an airy passageway from one classroom to another.

Many area vocational schools operate year round with both day and night classes. In fact there was no other solution for the community of Milwaukee. Here at the Vocational-Technical and Adult School the answer had to be classes twelve months a year and virtually a twenty-two-hour-a-day operation for nine months a year. Summer enrollment is open only to post high school vocational students.

According to George Parkinson, director of the school, there were about 22,000 students enrolled in day and night programs this fall, and there will be a cumulative enrollment of about 38,000 students by the end of the year. The student body is not only large, but also cosmopolitan, with students from all over Wisconsin, other States, and several foreign countries. The school is free to residents of Milwaukee but charges a fee to those living outside the city.

The Vocational-Technical and Adult School has five separate divisions:

1. The continuation program with 874 students is primarily for dropouts and is held during the day.
Area vocational schools such as DeKalb School near Clarkston, Georgia, offer a broad range of occupational and technical education tailored to fit the types of employment opportunity in their areas. DeKalb’s offerings include such diverse subjects as practical nursing, distribution and marketing, data processing, automobile repair, and metal working, radio and television repair, and medical assistance.
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2. The Adult High School with students aged 18 to 65 operates during the day with 312 students and in the evening with 876.

3. The Apprentice School with 919 students operates for indentured apprentices who attend classes one day a week.

4. The Institute of Technology features courses at the junior college level and awards associate degrees to its graduates. It operates both during the day and in the evening with a total enrollment of more than 8,000.

5. The Adult School has the largest number of students, 8,000 during the day and 12,553 at night, and offers courses under the Manpower Development and Training Act as well as under the Vocational Education Act.

The Milwaukee school conducts some 60 different programs encompassing approximately 1,200 courses. In fact, almost any vocation not requiring a degree can be learned there.

What about basic education subjects taught in area vocational schools? These are no less important to the student taking technical training than to the college preparatory student. Courses in reading, mathematics, science, and the like are important in learning a trade, and are given along with specialized training. A person's ability to keep pace with new developments in his line of work is directly tied to his proficiency in these fundamental subjects.

It is essential for the vocational student to discover his particular occupational niche as is it for the college-bound student to discover his academic potential. Vocational students are tested for aptitudes and abilities and counseled to assist them in preparing for the right career choices. Thus, the personal needs of the students and the needs of the community are satisfied at the same time.

Qualified students, well planned vocational curriculums, adaptable and attractive buildings, and an eye on the demands of industry—all these contribute toward a successful attack on the problems of supplying trained workers and filling the needs of an area's labor market.

During many visits around the country it has become apparent to me that there are a few distinctive features that mark the truly well-planned area vocational school. If I were to list them, I think I would include the following:

- The shops and laboratories of the ideal school should be developed around an occupational cluster, partitioned with acoustically treated removable walls. Rooms on both sides of a conventional corridor might well be modified to achieve fuller use of these corridors and still not overlook traffic patterns or safety codes and regulations. Sometimes a corridor can become part of a larger related unit. It has been found that lining corridors with lockers is not the best utilization of space. Lockers could be installed in a cross-sectional corridor unit with doors going to the outside; this would minimize traffic and leave the larger corridors to be used for individual study carrels.

- To avoid confusion, locker rooms, dressing rooms, and showers for use of evening students should be separated from those for use of day-school students.

- Laboritories should be adaptable to changes which may be brought on by technical advances in science and industry. The mechanical and electrical services of these laboratories should be planned so that when new automated equipment is added to the school's facilities it can be installed at a minimum cost.

- On shop layouts machines should be grouped so that they may be used by single-skill classes as well as by multi-occupational classes. Space for storage of materials, tools, and projects should be planned. The possibilities of incorporating into the school system a large central storage unit, which could also be used as a teaching station, should be considered.

- One of the most neglected of all elements in vocational schools has been the library. Small specialty reference libraries are no longer enough. There should be a large central library which will serve all the people in the community as a vocational-technical education resource center. These libraries should be properly staffed, and shelves should be fully stocked with the latest reference books and periodicals.

Great demands are placed on the use of lecture halls in an area vocational school. Sometimes a classroom-sized lecture hall is adequate but often—particularly for evening and night classes—large ones are needed. These should be planned in an unobstructed view. A round, stadium-type room is often advisable. They should be designed not only for lectures and visual aids but also for heavy track systems and turnstile floor areas for use of equipment. The ideal lecture hall, therefore, should become a truly educational unit, one which can be divided into a number of smaller rooms but still be used as a large hall when needed.

Thoughtful vocational educators everywhere are enthusiastic about installing built-in equipment, creating facilities for film demonstrations, providing closed-circuit TV systems, and varying the size and shape of classrooms and lecture halls. The word in contemporary vocational schooling is "modular." The well-planned school is one that can change with the times, one in which a room or facility can be added or eliminated without upheaval.

Since area vocational schools must train all who qualify, the school buildings should be designed to include features to accommodate physically handicapped students.

A ramp, rather than stairs, and a larger entrance door, perhaps electronically controlled, should be planned. Other special facilities that are needed include interior ramps with grab bars conveniently located, round hand railings in corridors and stairways, and slant-type stairs with lipless risers no higher than six inches.

Cafeterias should be planned to serve two, three, or more meals a day. This not only will help meet the needs of many students with small incomes but also will provide food services for those who come directly from their jobs.

Public transportation and parking facilities need to be well planned. Many persons are discouraged from taking advantage of the educational programs which are available because these facilities are not adequately provided. The new Atlanta-Fulton County Area Vocational School, for instance, will have a paved, well-lighted parking area for 1,600 cars.

This brief description doesn't say it all by any means. But the points I have mentioned have proved to be very successful. The Office has prepared a detailed guide for educators who need information about establishing an area vocational school. This illustrated brochure, entitled Basic Planning Guide for Vocational and Technical Education Facilities (OE-80040; price 20¢) may be obtained from Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402.

Expenditures of Federal, State, and local funds for vocational education have grown phenomenally in the last 20 years. In 1945 approximately $66 million was spent for vocational education, compared to more than $588 million in 1965. It is significant that the amount States and local school districts spent was three times what the Federal Government contributed. Federal funds for vocational education totaled $146 million compared to $175 million in State funds and more than $266 million in local funds.

Enrollment in vocational classes more than doubled in that 20-year period. In 1945 there were slightly over 2,000,000 students enrolled in vocational education compared with 5,395,000 in 1965. Since enactment of the Vocational Education Act of 1963 the number of students participating has increased by 1,178,000 or more than 20 percent.

Projections of the U.S. Office of Education indicate that 564 new area vocational schools will be built in the coming fiscal year with the aid of Federal funds. This number is greater than the total number of such schools built in the three years since the Vocational Education Act of 1963 was passed. Area vocational schools are fast becoming a vital part of the Nation's educational system.
In a well-planned area vocational school efficient storage is provided for tools and other equipment in or near shops and laboratories. Machinery is placed for maximum use, and classrooms are convenient to training areas.