



Technician student, George Baker, mows tee at Cleveland Metropolitan Park golf course.



Students in technical school which is post-high school gain experience with equipment.



Technician student, John Healy, makes lab tissue tests for foliar nutrient analyses.



Technical school group gets practical as well as classroom experience such as sod installation.

Formal Training and Recruitment

A PROGRAM, set up and run at the local level, appears the best answer to date in supplying trained help for the horticultural industry.

Men in every phase of the industry—arborists, nurserymen, golf course superintendents, spraymen, landscapers, sod growers, park managers, and others—decry the fact that enough competent help is not available.

Today, one of the few local programs of any size which is attempting this job—recruiting students for formal training in this field is that of the Cleveland Public School System, Cleveland, O. This is a local school system program which trains students in horticulture during their final 3 years of high school. The program also includes a 2-year technician school for post-high school students, aimed at training foremen for the vegetation care industry. The program was started in 1962 with 17 high school students. Enrollment is now 349. The 1969 classes will involve 375 students, 25 of whom will be in the 2-year advanced technician program.

Vince Feck, a teacher with

can help meet the industry's labor needs

agricultural education training heads the Horticultural and Technical Vocational Division. Because of the scope of the program, and the important job of recruitment, he finds little time for teaching. Feck headquarters at the Cleveland Board of Education building in downtown Cleveland and administers the program which is carried at 9 of the city's high schools. The technician program, because of the need for field work, is handled at a number of the schools plus nurseries and various field sites in the area.

The overall program has the single purpose of training non-college students for industry jobs. Student guidance counselors agree that many students who do not succeed in academic subjects do much better if provided with vocational programs. The Cleveland program in the horticultural area is aimed at giving trade school or vocational training to the high schooler who is interested in the vegetation field. Such high school students naturally will start in industry as hourly employees. By contrast, the technical program

which offers 2 years of post-high school training plus required work in the industry during this

period, provides qualified employees with definite potential as foremen. Some of the techni-

Cleveland Board of Education Horticultural Technical School

Enrollment Details:

Eligibility: High school graduate or equivalent
Residence: None required (out-of-state students pay same fee as local enrollees).

Interest and Experience: Students accepted who are interested in non-crop horticultural training including training as arborists, spraymen, turf specialists, golf course superintendents, nurserymen, park management, municipal operations, and similar vegetation care positions.

Draft Status: Students enrolled full time receive the same draft status as regularly enrolled university students.

Schedule: A 2-year school beginning September and/or January.

Cost: \$145 per semester for tuition plus books and laboratory fees.

Information: Contact Vince Feck, Coordinator
Horticultural Technical School
Cleveland School Board
1380 E. Sixth St.
Cleveland, Ohio 44114



Technical school at Cleveland, O., gets young men ready for full-time careers in the broad range of jobs available in non-crop horticulture field. On the left is Bill Fry, manager at Forest City Tree Protection Company, Cleveland. Fry devotes time to teaching in technical school and at present has 2 students in the employ of his company. Next to Fry is Vince Feck, coordinator for the School. Student on the truck with spray gun is Angelo Cammarata and at right is Student Nick Costello.

cian students find and fill foreman jobs during their period of schooling.

School Credits Given

The Cleveland program should not be confused with work-study and similar Federal government programs which subsidize young, unemployed prospects. The Cleveland school program is a vocational type training for which formal school credits are given as is true with other types of vocational school programs.

For example, high school students from the sophomore through senior years can take a specified curriculum in the horticultural field. This major course of study is aimed at preparing students for both semi-skilled and skilled positions. Courses for the high school student include identification and culture of ornamentals and turf, seeding, sodding and renovation of lawns, control of weeds, insects and diseases, watering, fertilizing, mowing, spraying,

mixing soils for top-dressing, aerifying, and dethatching. Related skills are also taught in small engine maintenance, landscape planning and some soil science, botany, and physiology.

Students beyond the high school level in the 2-year technician program can specialize in either a turf management program or in ornamental horticulture. Their courses are more technical in nature and they are taught by instructors from the industry who teach only on a part-time basis. Courses are planned on an 18-week semester basis. Students are scheduled for 25 hours of class work weekly. Many work an equal number of hours as paid labor in metropolitan Cleveland companies specializing in the student's major subject matter area. Currently, the technical students are working for arborists, golf course superintendents, and landscapers. In the classroom and field laboratory sessions, they get practical

instruction direct from teachers who are in the vegetation care industry. Besides horticultural subject matter, technicians also receive training in business principles, communications, and mathematics.

Program Is Needed

Need for a program such as this at Cleveland need not be argued. In Ohio, which is typical of many other states, only about 19% of all high school students are engaged in some type of vocational education. A whopping 81% are enrolled in a general or college prep course, yet less than 22% or only about one in five has some type of definite plan for either college or post-high school training.

For a school system contemplating a program of this type, funds for operating will be a big factor. Feck says the cost of the program is high, partly because of the low enrollment per teacher (about 30) and because of the facilities and equipment which are essential to provide adequate instruction.

Available funds include both federal and state monies. The Smith Hughes Act, the George Barden Act, and the Vocational Education Act, 1963, combined to provide some \$225 million nationally in federal funds for the year ending June 30, 1967. Ohio's share of these funds amounted to almost \$10 million. Such federal money may be and is used for vocational education for those attending school, for post high school instruction, and for training and retraining people already in the labor market. Among other things, money can also be used for construction of vocational facilities, and teacher training and supervision. States and local school systems also have provisions in most areas for some type support for such training. The 2-year technicians in the Cleveland program also pay a \$145 per semester fee. They

are recruited from areas throughout Ohio.

Facilities in the Cleveland school system for horticultural training are extensive. For example, at the West Tech school, facilities include 7000 square feet of greenhouse space plus a classroom, built at a cost of \$200,000. Other facilities are less extensive. Currently being built is a greenhouse along with teaching and outdoor planting facilities on top of the 2-story South High building. This is slated for use during the fall, 1968 season. Additional plans call for a new horticultural educational center facility with extensive acreage for work experience.

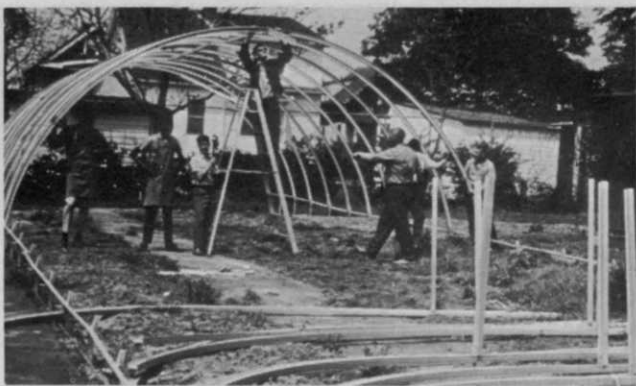
Problem Areas Exist

Naturally, a program as extensive as this must be questioned as to its effectiveness. It must deliver qualified employees for the industry, and it must attract students who have potential to become the type employee the industry demands.

Feck, who is directly responsible for the program, is the first to admit that many problems, both those on the surface and some which are deeply sociological, exist.

Cleveland, by the nature of its population make-up, has an inter-city youth problem, part of which hinges on poverty and part on race. The problem in many vocational training programs and in government sponsored work-study programs is that many of these young people are what are commonly referred to as unemployables. The question as it reverts back to the high school and technical horticultural training programs is the potential ability of the students being trained. Employers in the vegetation care industry, if they are to be competitive, have to have better educated help, employees capable of management, and more sophisticated equipment. They can not, and will not, trust their business and equipment to questionable em-

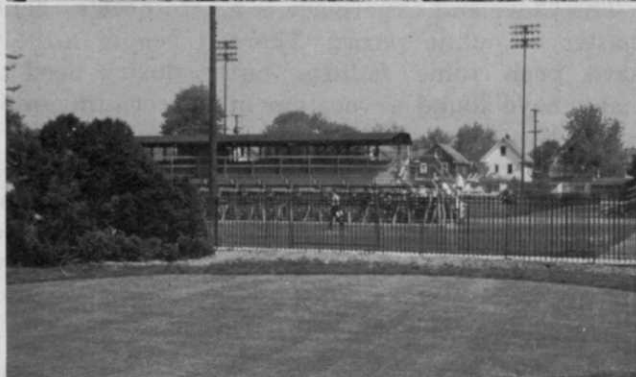
Plastic greenhouses such as this have been constructed by high school students at 3 schools.



West Tech High School has been beautified by borders planted by high school horticulture classes.



Golf green is constructed one year by high schoolers during their 3-year course.

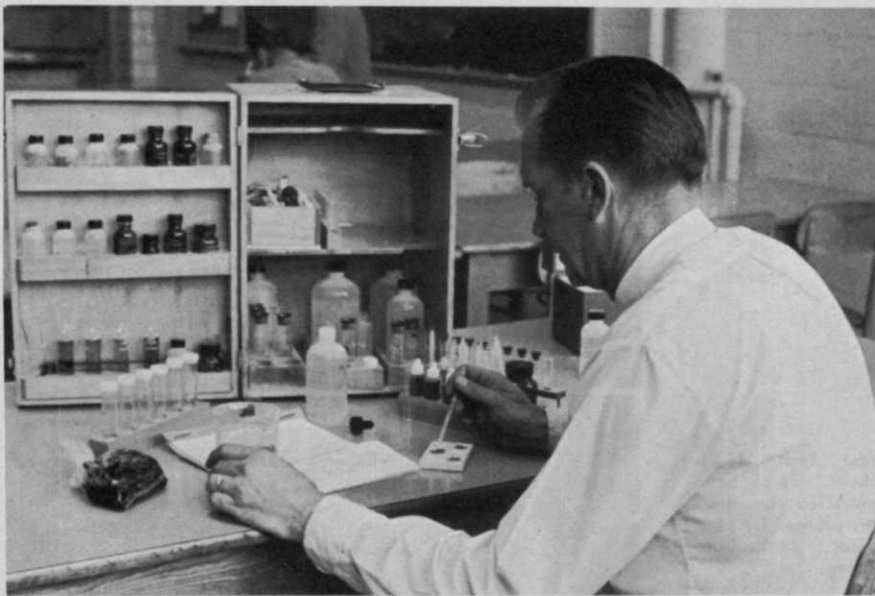


Annual garden at West Tech is planted seasonally by high school classes at that location.



High school students at Thomas A. Edison school operate soil shredder and other equipment.





Technician student, William Kilmer, in his second year of the technician course, uses a soil test kit for soil nutrient analysis.

ployees, however knowledgeable they may be in the subject.

The Cleveland experience is a matter of public record. There have been some failures but many have found a vocation in which they can and are succeeding. Frederic L. Witt, landscape architect for 50 Catholic cemeteries in the area, regularly hires trainee students. He reports finding a number of young men who have found a vocation and way of life and are working at it. Witt has high hopes for the program.

Top Students Attracted

Because the horticultural training curriculum has been planned, as is typical for vocational training, for the student who does not plan for college, does not mean that only academically poor students are attracted. Feck says the opposite is more likely to be true. Many top students who do well academically, are taking the high school courses. A number, as a result of their high school experience, are majoring in related fields in college. Each semester, a number of the post-high school class of technicians are lost because they find that they want to pursue the training on a full-time college basis. This is not a pro-

gram loss, Feck states, but an overall gain for the industry.

Feck's belief is that more people in the vegetation care industry need to help in actively recruiting young people for training, both at the high school and post-high school levels. Feck emphasizes that the program is an industry conceived program. It operates with an advisory committee of industry, university, vocational, and educational leaders. Industry leaders are mostly those in the metropolitan Cleveland area who are hiring students on a regular basis.

The Cleveland program, though still relatively new, of-

Greenhouse complex, right, comprises more than 7000 square feet of facilities at West Tech High School.



fers an example of a major effort to attract and supply qualified employees for the non-crop horticultural industry. It has attracted national attention, with numerous visitors from other areas of the nation. Toledo, O., and Los Angeles, Calif., representatives have visited the program and are developing similar training programs. If the system is sound, many more of the same type are needed.

Then it becomes industry's responsibility to this and similar programs to offer the competitive wages necessary to secure and maintain such qualified personnel.



Student in technical post-high school curriculum repairs divots on Cleveland Metropolitan Park golf green.