The latest principle behind designing and planning vocational-technical school is "built-in-pride", which must be motivated in both student and surrounding community. We are at last emerging from the dark tunnel of the "trade school", away from the cold institutional look, the clamor of shop classrooms, echoing corridors, and the invisible tattoo of "labor" or "dropout" on each student's forehead. This change in attitude has found its realization in the design of new facilities as follows—(1) the community college concept, offering more prestige than is usually found in vocational-technical institutions, (2) the shopping center concept—each class having large glass doors opening onto an outdoor mall, allowing students to window shop and providing a wider range of vocational experiences, and (3) the resort concept, a combined liberal arts and vocational-technical campus which is gaining in popularity and where, in an atmosphere similar to that of their chosen profession, students may learn skills in connection with forestry, boats, jeeps, snowmobiles, or motel management. These vast changes are in keeping with the responsibility we have to strengthen America by providing educational facilities which will actually motivate and encourage people to learn to be self-respecting and self-supporting citizens. (KK)
No doubt you will all remember that standard old movie scene where we meet the efficient secretary -- bespectacled, with her hair tight upon her head, her shoes and clothes old-fashioned and ugly -- then suddenly, she lets down her hair, tosses away her glasses and oxfords and emerges as the dazzling center of attention! That's motivation!!

And that's just about the case for vo-tech schools today -- not as dashing a routine, maybe, but basically it's the same idea. The old-fashioned "trade school" has tossed away its blue shirt-sewing machine-rice pudding image and is achieving center stage in the educational world today -- and facility planners, educators and architects are enjoying the new limelight on a previously grim aspect of schooling.

With literally thousands of youngsters unable to attend college -- maybe they can't, maybe they shouldn't -- in any case, 60% of high school youngsters won't -- but they must be prepared for earning a good -- and dignified -- living without tagging them as "second class students." And so our first new concept in planning vo-tech facilities must be "built-in pride."

(MORE)
The school must inspire and motivate this pride in both the student and the community -- the student is understandably touchy about his separation from friends who will go on to college; the community is apprehensive about "trade school" kids, believing they are generally drop-outs -- and they're squeamish about such institutions being built in their neighborhoods. However, the new vo-tech school, today often called "The Community College" because it may include a two-year liberal arts curriculum, is erasing these ingrained resentments thanks to the emancipation of educators from stereotyped planning and the new freedom of architects in design.

Now included in planning sessions from the earliest days of selecting a site, the architects of the nation's fine new vo-tech schools are proving they can match vision with reality, and transform intangible values and ideas into solid educational innovations. Among these are the vo-tech campus, a "college" concept for real prestige -- the "shopping center" concept of glassed-in classrooms to permit the student to "window-shop" courses to stimulate interest in various new areas -- then there's the new "resort" concept, with a combined liberal arts and vo-tech campus spread throughout wooded areas to create a harmonious atmosphere. Another important development is the solution to the land-starved urban school which can go underground for added classroom and lab space while providing fine civil defense safety areas.

Blue-printing every predictable reaction to the building, architects prepare the student for the dignity of his career by assuring him of the school's respect for his preparation -- today the dignified environment includes many carpeted areas, air-conditioning, subdued lighting, floating staircases, colorful study areas, plantings and art

(MORE)
forms. The whole effect reassures the bruised ego -- it is uplifting to the spirit -- to me, it is almost as though we were at last emerging from the dark tunnel of the "trade school" -- away from its cold and institutional look, the clamor of shop classrooms, echoing corridors and that invisible tattoo of "labor" or "dropout" on each student's forehead.

A very real challenge for today's educator and architect, each projected vo-tech school is an independent solution to a local situation -- this is a wonderful state of affairs, I believe, since it forces each school board, educator and architect to create a completely "custom-made" school to fit a community's specific needs. There is always a better way. This breaks down the last barriers to good design -- since the architect must embrace within his structure the facilities for producing students and future happy citizens of value to their community.

Instead of turning out a continuing and uninspired mass of auto mechanics, typists, electricians and cooks, today's vo-tech school is specializing in courses relevant to the industries nearby -- the "resort" concept, for instance, isn't all luxury and vacation-oriented -- it actually is an efficient base for teaching skills in connection with forestry, boats, jeeps, snowmobiles and even in motel management.

Several schools are developing skilled landscapers and florists in answer to the demand for such talent from florists' associations -- and these experts, in turn, offer their advice and instruction. Large metropolitan areas are in need of restaurant chefs -- of data processing operators -- interior decorators -- professional window display artists -- every city, town or suburb has its own identity in commerce and is eager to absorb students with ambitions in these fields, and in the vast new fields of space technology, advanced computer applications.

(MORE)
and electronics.

Among the outstanding schools in the country is the Southern Nevada Vocational Technical Center, designed by William Blurock and Associates. It is a true vocational center, built to serve students from third year high school throughout all their lives. Citizens of Las Vegas were consulted about their needs, and instructors were drawn from the ranks of successful professionals in fields from cosmetology to business management. These specialists added their business experience to the architect's initial plans -- and they recommended features which would accustom the student to actual future working conditions. A noted hotel chef, in particular, alert to local health laws, helped develop efficient new systems for the institutional kitchen.

In Las Vegas, we find one of the best examples of supplying specialized talent for local needs -- the school's future plans include a small theatre for teaching the theatrical trades -- Las Vegas is noted for tourist trade production and the young people who study backstage skills will find a warm welcome in the rapidly growing theatrical center which is their city.

This community relationship is considered so important in Portland, Oregon's, Community College, that a State Employment Office representative is permanently assigned to the campus and is readily available for advice and direction.

While we are on the subject of courses which benefit the community, let me suggest that the future will see many small "spin off" schools, which will be built adjacent to actual commercial operation -- for instance, in Kenosha, Wisconsin, we already have an aircraft and tower control training school which was constructed on the city's own airfield to afford actual flying conditions. In the Las Vegas school, the reverse
is true -- the local educational TV studio occupies space at the school -- and it is hoped that a television technicians' course can be introduced in the future.

And so, with communities enthusiastically "tuned in" to the idea of modern technical schools, our educators are gathering the courage to scotch a few myths -- and to trample on traditions which could delay progress. Vital new forces in this educational field, these people have struggled free to take advantage of creative ideas -- and a selection of their achievements has been saluted by the Educational Facilities Laboratories in a recent report -- among them are the Oregon and Nevada schools I have already mentioned.

The report outlines in detail the success of bold strokes against the conventional "box shape" classroom, against the administrative center which locks out the student, against the clutch of "family" courses which puts all the shop studies in a single area away from academic students -- it underscores the benefits that students gain from such free-wheeling attitudes of educators and architects alike. From pastel-colored lockers to closed circuit TV to boiler rooms on the top floor to provide excellent teaching facilities, each school's innovations are brightening the picture and making the future of the vo-tech school one of visual excitement as well as educational excellence.

At the Martingrove Collegiate Institute in Ontario, Canada, architect D. Rose King wanted to make maximum use of wall space and so used clerestories above the 7 foot level for arts and crafts areas or to light the great octagonal library. In Quincy, Massachusetts, architects Caudill, Howlett and Shott recommended that the new technical school become an extension of the high school and they designed it side by side with the original building and connected the two with a heated

(MORE)
glassed-in promenade bridge -- thus the two schools share costly mutual resources, such as library and auditorium, without duplication.

Inspired by the instructors who urged the use of actual professional equipment in classrooms, architects of the Las Vegas school have been bold enough to make use of ordinary noise -- yes, the noise or sounds that will prevail in the world of work these young people will inhabit -- next to each shop and well within noise-range, the architects have placed a classroom for related bookkeeping, tax studies and other sit-down subjects.

In Portland, Oregon, architects Wolff, Zimmer, Gunsul and Frasca translated the ideals of President De Barnardis into a really exciting departure from convention -- the "shopping center" school actually incorporates a series of outdoor plazas and promenades which connect the small classrooms, each with a single exit opening onto the outdoors -- the President feels that the ability to walk around outside and look into classrooms acts as a successful lure to bring students to a peak of interest. And the idea takes full advantage of spectacular scenery -- besides, it saves money -- no interior corridors!

These schools and many others in the drawing board stage, are destined to change the educational picture -- they will be powerful advocates for the proposition of technical training. These parents who selfishly plan to add their child's college career to their personal list of social assets may find themselves wavering from their stubborn course -- hopefully they will find themselves intrigued with the handsome structures, the beautiful campus environment, the sophisticated equipment and enthusiastic faculty of today's new vo-tech approach.

Probably the best news to school boards is the fact that this "miracle-working" with new concepts and design is done within the limits (MORE)
of the local budget -- for there are many ways to assure economy without sacrificing creativity. I believe our own design for our own Kenosha Technical Institute, which was also selected for the Educational Facilities Laboratories report, will serve as an example -- there are no windows, but connecting glass-walled corridors between the six buildings give an effect of brightness -- bright colors, warm lighting and indoor gardens, do too. The windowless building reduces maintenance costs, cuts the heating and cooling bill as well as removing temptation for vandalism.

Architects today are tunneling into existing hills and going underground for lower level classroom space with vast expanses of wall area for installation of space-eating lab equipment -- here, too, that windowless concept saves money. Going underground conserves land and in the district where land is scarce and costly, the lower level of classrooms is invaluable to economical planning. There is no claustrophobia in the underground classroom, library, music room or laboratory -- on the contrary, lighting, bright colors, living plants and glassed-in areas are wonderfully deceptive and give a healthy illusion of sun and an outdoor environment with a minimum of noise and distraction. Often the use of color in good taste can be the key.

When I talk of "today's" vo-tech school, I want to underscore the fact that I'm talking about tomorrow's school -- the same school that will be functioning efficiently fifty or sixty years from now! For flexibility is "built-in", too -- we realize we must design for a revved up world which is changing rapidly -- the technology of today will be swept aside for tomorrow's -- and our classrooms must be ready to shift emphasis -- and, literally, to "knock out" walls and reorganize space. The schools must easily accommodate creative educators' new concepts.

(MORE)
Today an architect would no more think of submitting a static plan with all the facilities frozen into place than he would think of recommending a site on top of quicksand! Acoustical control has opened up new exciting flexible concepts.

In this search for ingenious methods to insure flexibility, there are educational space concepts which show originality and daring--floors are designed in units to permit heavy equipment to be lifted and rearranged as new flooring--corners of buildings turn into three pie-shaped classroom spaces which can then open into one single lecture room--there are carpeted classrooms with no walls at all which permit flow of traffic between classes--in some cases liberal arts and vo-tech students are neighbors who assess each other's interests and develop mutual respect. There are classroom spaces connected by closed circuit television alone or those which are "clustered" near related courses.

To permit tomorrow's instructors to shape their own classrooms, some of the new "walls" are actually moveable cabinets which may be rearranged to broaden or narrow the instructor's range. In a giant-sized plan to prepare for the future, we have blueprinted a Cleveland school which will "explode"--in an orderly fashion, of course--to permit growth. Exterior precast concrete walls are designed to be moved outward and reused, each as a single unit, readily making additional interior space available. Many of today's architects are refusing to "nail down" any furnishings or equipment--to be perfectly attuned to any curriculum in any coming year, the ideal school interior just "floats," unanchored to any specific idea, readily turned to more efficient use at any time.

Flexibility means, too, that the school must be engineered to serve as a community center for continuing education--for the day is at hand when the cap and gown will be as obsolete as the toga--when no-one

(MORE)
will ever be finished with education. The world that whirls toward planetary achievements will certainly spin its people into a pool of constantly widening knowledge. I believe that the future vocational technical school will actually become a community cultural center for all ages -- that adult training will serve to make the community aware of the school's contribution to local affairs. The vo-tech center of the future will radiate information on arts and sciences -- it will be the hub of the new suburbs, focusing attention on theatre, art exhibits, musical productions and political forums, as well as maintaining its teaching role -- training for stenography, law enforcement, computer skills, business management, fashion merchandising and other career arts.

These services to the public will be on all levels -- ready for the young student when he is, waiting for the adult when he realizes what a wealth of new or renewed skills is available to him. President Nixon's recent speech on the new welfare programs reflected an ideal that all of us within the vo-tech field have cherished -- he spoke of "full opportunity for every American to be productive" -- and he summed it up for all of us by declaring the job-trained citizen will be "self respecting and self supporting."

Even more recently he underscored the importance of producing skills which can solve emergency situations when he placed the restrictions on construction. At the same time, he directed labor and health, education and welfare secretaries to accelerate job and vocational training to produce substantial increases in skilled construction labor and the retraining of adults into new skill areas.

All of us who take part in the planning and design of vo-tech schools try to make the promise of "self support for true self respect" a living thing, an integral part of our planning. We have the

(MORE)
responsibility to strengthen America by providing educational facilities which will actually motivate and encourage people to learn -- and this stimulation to learn will eventually result in many more productive and happy citizens helping to build our country.

# # #