You can bring a little more peace to the world, because Electric Heat is the great peacemaker at home. It lets Him and Her (and everyone else) select their own room temperature. That's just one of the many modern, reliable features of Electric Heat. It's clean, too. Actually helps reduce housework. Electric Heat is so quiet you're hardly aware it's there. And, count on trouble-free operation, because there are no moving parts to wear out or repair. Isn't this the kind of comfort your clients deserve? So, be a peacemaker. Recommend and install Electric Heat!

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
WHY DO SO MANY DESIGNERS "SHOOT" FOR THE ALL-ELECTRIC BUILDING AWARD?

Because they have their clients' best interest at heart. They know that a building designed to meet the All-Electric Building Award standards today will still be modern in the 21st century. And, they know that by incorporating the all-electric concept into any design picture they can gain more flexibility in their plans, choose from the widest selection of equipment and systems, and tie heating, cooling and lighting into ONE efficient operation that is flameless, clean, dependable, safe and economical. Want more reasons? Call our nearest business office without obligation; we'll be happy to give you the complete picture.

Jersey Central Power & Light—New Jersey Power & Light
Subsidiaries of General Public Utilities
To keep pace with New Jersey’s rapidly accelerating growth, and the resulting expansion in plant and building construction, member contractors of the Heat & Cold Insulation Industry offer their professional expertise to meet the ever-increasing demands and standards in planning, evaluating, selecting and adapting thermal insulation materials . . . in developing improved application techniques . . . and continuing to furnish the special skills and experience of a highly trained and reliable labor force.

With more than 150 areas of thermal insulation application for heating, plumbing, refrigerating, ventilating and air conditioning . . . specifying, design, consulting and maintenance engineers can depend on the member contractors of the Heat & Cold Insulating Industry for every possible assistance.

For information contact:
HEAT AND COLD INSULATION INDUSTRY FUND OF NEW JERSEY
520 Westfield Avenue, Elizabeth, New Jersey 07208  (201) 353-5441
As I See It

President's Page

Tomorrow's Campus

Atlantic Community College

Bergen Community College

Burlington County College

County College of Morris

Essex County College

Gloucester County College

Mercer County Community College

Middlesex County College

Appointment to State Board

COVER: Community Colleges appeal to people of all ages. This photo was taken at Essex County College.
When will we understand that it takes time to create architecture?

In this rush, rush world of ours, it seems to me that while projects are getting more complex, there is less and less time allowed for their execution. We are constantly fighting unrealistic deadlines. There seems to have arisen an aura of fantasy surrounding the time schedules for building projects... and it's bad for everyone.

Here's a scene that seems to be getting more and more typical. An architect is interviewed by a corporate client. The proposed project is a 4-million dollar laboratory. In addition to the standard services the architect for this project is required to analyze the similar systems in existing buildings and to prepare a program of requirements. Nothing unusual so far.

"Oh yes, just one other requirement", notes the client. "We must occupy the new building on 1, January, 1971!"... 15 months from the date of the interview. Allowing a minimum of twelve months for construction and one month for bidding would leave only two months for the architect to fully develop the project!

The funny thing is that there was plenty of time for the project when the corporation started. Twenty-four months had been allowed for the project development. However, by the time all levels had noted their approval in the proper spaces and by the time the company had completed its architect selection process, the time left was inadequate. Any change in the occupancy schedule meant again going all the way up and down the chain of command.

Faced with this time dilemma, the dreaming begins, with both Architect and Owner contributing. For their individual reasons they both agree that something can be done to maintain the schedule. The Architect, concerned about losing a commission and in an effort to please, reduces his time requirements unrealistically. The Owner, afraid to go back to his management with a request for delay, promises to limit his time for approvals unrealistically. The result is that the project ends up poorly planned, hastily constructed and missing the deadline, anyway.

Of course there are effective ways to save time in a project such as through pre-ordering materials, letting out the foundation contract while the superstructure is under design and negotiating cost-plus-fee construction contracts, etc. However, these savings are in the construction stage, where you usually can trade time saved for money spent. But how do you save time in the planning stages?

I maintain that during the conceptual phases of a project there is no substitute for the time necessary to examine, analyze, compare alternatives and arrive at the proper conclusions. It is during this period that the basic decisions are made which determine the direction of the entire building process. These first moments dictate the success or failure of a project.

Similarly, enough time must be allocated for the client's decision making and approval procedures. Especially with multi-layered organizations such as governmental agencies and large corporations, it takes time to properly disseminate information and obtain approvals. To not allow a sufficient period in the time schedule for these activities is pure delusion. The fact is, the time will be taken anyway. Architect and Owner must be realistic and allow themselves adequate time during the development stages to carry on the dialog necessary for proper planning and assure themselves the success of the project.

There is no substitute. It takes time.
For the past several months, architects in practice, who keep attuned to current business trends and happenings, must have again looked about in bewilderment and wondered... Where do we go from here?

It seems only a short time ago that there was introduced into this traditional profession the new concept of the role which the Architect would play in the future; namely that of overall planner - manager - coordinator - designer - master builder of the total environment. For many of us, the acceptance of this comprehensive role was difficult to assimilate. Tradition was deeply rooted and habits were not easily changed. What more was required of the Architect than to solve the need by creating adequate shelter in an aesthetically-pleasing enclosure?

As the understanding of this broader scope of practice settled over us, Architects slowly became increasingly aware of the need to depart from traditional methods and to adjust our thinking to the expanded role about to be thrust upon us. Fundamentally, either it was acceptance, or be relegated to the role of a subservient to another professional, who would assume the responsibility. And to encourage acceptance, the American Institute of Architects, at the 1970 national convention, plans to revise the Standards of Professional Practice to remove certain binding restrictions and permit Architects to broaden the general scope of their practice. A giant step forward, very much in keeping with the ever-changing philosophies of our new environment.

One might expect that the Architect, having finally reached an understanding as to the future of the profession, would proceed through a gradual period of adjustment to attain his new status in an orderly fashion. But it was not decreed to be so. Suddenly, with little forewarning, another crisis has appeared which might seriously affect the entire future of our practice, namely the bugaboo of inflation.

The foundation of construction is money — no plans can be created, no construction can be fabricated, no project can ever proceed without it. But money has become "tight". Due to governmental restrictions, basic regulations and other impediments, a client, whether he be private or public, now finds himself in the difficult situation of being virtually unable to finance his project, whether it be by bond issue, institutional lending, private financing or any other acceptable means. The high prime interest rate, the greater cost of construction by virtue of higher labor rates, the restrictions on lending; all have combined to so effectively handcuff the profession that unless drastic steps are taken to ease this financial stalemate, all construction in our country must eventually grind to a complete halt.

So again we are asking ourselves — Where do we go from here?

Harold D. Glucksman, AIA
President
Creating Tomorrow's Campus
Team Concept

“This Seminar explores a totally different and expanding relationship between client and architect from that which has been the traditional pattern in the past,” said Bernard J. Grad, FAIA, as he introduced the topic and panel of speakers at Newark's Hotel Robert Treat on November 1, 1968. The group gathered to share the challenge of planning higher educational facilities by team interaction.

Attended by 70 persons — educators, architects and media representatives — the program began with luncheon at noon. This was followed by a panel consisting of a college president, a learning resources consultant and an architect: Dr. Robert H. McCabe, former President of Essex County Community College, Newark; Dr. Franklin Bouwsma, Vice-President, Office of Instructional Resources, Miami-Dade Junior College, Florida; and Mr. Harry B. Mahler, A.I.A., Partner, Frank Grad & Sons, Newark.

These speakers explored their experiences of team collaboration in a formal presentation followed by a stimulating, open discussion with members of the audience.

McCabe said that the world is in a period of tremendous change, a change felt more in higher education than anywhere else. “We have to start asking what a college is going to be . . . what it's going to do . . . and what community will it serve.” The need for college officials to work with architects in the development of building programs is the result of these changes and resulting questions, he said.

Continuing, McCabe stated that future curriculum changes and rising costs must be considered in “long range planning for the future”.

He suggested that college administrators travel to other educational institutions to get a variety of ideas, to pinpoint uses for each facility, and to recognize when “to sign off” or end planning.

Dr. Bouwsma demonstrated total planning to suit specific college needs with slides of the extensive audio-visual system at Miami-Dade Junior College. He described new strategies and systems employed for the students there. “Living with growth and change,” he said, “must be an overriding consideration in any college”.

Since January 1, 1968, Bouwsma has been involved with twenty colleges in programs which relate to design solution and specifications for buildings, equipment and faculty development. The systems approach has been used in each situation. He explained, step by step, the details of this system. Bouwsma concluded, “The final result should be a flexible space, well suited to the community, which can operate on a sound financial basis and which has been built to meet alternate program needs.”

Harry Mahler emphasized the necessity of a “dialogue for understanding” among all persons involved in the planning operation. Using slides of colleges and universities across the country, he demonstrated how facilities and overall architectural design can be used to suit the student body and help the entire educational community to “wear architecture like a glove”.

Mahler referred to his own experience as an active participant in the programming of Bergen Community College, Paramus, N. J. To establish a working vocabulary with the president of the college, Dr. Sidney Silverman, by dialogue and professional exchange, the two men traveled together, visiting already constructed community colleges throughout the United States and Canada.

All three panel members discussed the importance of planning for the “behavior aspects” and “social interactions” when designing a college facility. Their individual comments extended the statement of Bernard Grad when he introduced the Seminar: “The need for this new collaboration in a team framework has been generated because we are now living and working in a time when our society is experiencing changes of a most dramatic nature . . . Therefore, a concerted and cooperative effort by men experienced in their respective professional areas will be necessary to meet this ‘explosion’.”
COMMUNITY COLLEGES

by Gail D. Wagner

The community college is unique: A thoughtfully planned solution to a growing educational problem. It's a contemporary response to a vital need.

The community college believes in challenging the potential of the individual. It offers a multi-leveled curricula to prepare students for useful employment or for continuation to four-year institutions. It stimulates learning on all levels.

The community college is community-oriented, opening its doors to become a dynamic cultural and educational force in the local area.

The community college concentrates on the needs of its heterogeneous student body, offering a low student-teacher ratio.

The community college is different.

So the architect must stretch. He must research and plunge and discover. He must create new and exciting environments to architecturally express an evolving educational philosophy resulting from current and future needs.

The present situation:

More than 26,000 students will attend classes this fall when public, two-year colleges open their doors in 14 New Jersey counties. The enrollment is more than five times that of 1967.

Therefore, we present the colleges in this series as only a taste of what is happening in our State. One part of the entire adventure.
ATLANTIC COMMUNITY COLLEGE
Mays Landing, N. J.

Architects:
THE BALLINGER COMPANY
PHILADELPHIA, PA.

Site:
Typical Southern New Jersey pine and oak woodland, the 150-acre site has maintained its wooded character while providing ample space for the college complex.

Program:
To provide a one-story campus suited to its natural environment for approximately 800 students with the possibility of doubling the enrollment within 5 years. Total area: 100,000 sq. ft.

Solution:
A complex of six buildings: Administration-library, Student Center, General Classroom, Science, Physical Education and boiler plant.

Structure and Materials:
To permit flexibility, a structural steel frame instead of wall bearing construction. A central refrigeration plant air-conditions the administration-library, student center and science buildings.

Exterior materials are white split faced brick, solar bronze glass with black anodized frames, and mansard type cedar shake shingle roof.
CLASSROOM BLDG

ADMINISTRATION-LIBRARY BLDGS

KEY
1. student affairs & admission
2. administration
3. business
4. library administration
5. conference & seminars
6. toilet & mechanical core
BERGEN COMMUNITY COLLEGE
Paramus, N. J.

Architects:
FRANK GRAD & SONS
NEWARK, N. J.

Site:
Sited on the highest knoll at the center of a 167-acre former country club, the campus occupies approximately the area of 6 square city blocks. The serpentine parking areas recall the natural contouring of the site, providing parking spaces for 80% of the daytime enrollment.

Program:
To accommodate a two-year college, serving a commuter population. Initially serving 2,500 full-time and 5,000 part-time students, the structure functions to respond to the needs for a strong community relationship, a highly flexible curriculum and to provide for the interaction of a mobile student and faculty body. Total area: 430,000 sq. ft.

Solution:
This contiguous "mega-structure" provides for a multiplicity of functions and the potential for vertical and horizontal expansion. The separate academic and career disciplines are related architecturally to the Library-Learning Resources Center, the nucleus of the plan. Combining the completely contained weatherproof features of northern buildings with the open, campus-type style familiar to many academic communities, the design of the omni-building features outdoor terraces and landscaped patios flowing into each other to provide natural communication among the separate elements and connections among the three levels of the building. Phase I: Library-Learning Resources Center, Administration, College Center, Humanities, Business-Commerce, Science and Physical Education areas. The Master Plan contains a second construction phase to accommodate an anticipated maximum enrollment of 5,000 full-time and 10,000 part-time students.

Structure and Materials:
Cast-in-place architectural concrete is to be used throughout as both a structural and aesthetic statement. The concept of a 30' x 30' construction module is consistent throughout the scheme. The exposed surface of the architectural concrete will have an off-white aggregate texture to contrast with the bronze anodized aluminum window and door frames, glazed with heat absorbing bronze glass. Exterior landscape paving will feature brown brick, which carries through into the main interior circulation streets. The walls of the streets create the impression of warmth through the use of natural color, terra cotta block and further enriched by wood-slat ceilings.

The compact design of the megastructure system permitted an efficient and economic application of total electric heat and cooling thus enabling simple expansion of the Phase II mechanical system.
BURLINGTON COUNTY COLLEGE
Pemberton, N. J.

Architects:
KRAMER, HIRSCH & CARCHIDI
TRENTON, N. J.

Site:
An approximate rectangle, three times as long as its width. Most of the 228 acres consists of a gently undulating meadowland with a thickly wooded area flanking a creek on the remaining one-third.

Program:

Solution:
The linearity of the site determined the building form with its differently proportioned enclosures. The woods and creek are areas for planned and casual campus activity. In spite of its complex outline, the main building retains a simple relationship to the three basic areas: teaching spaces, independent study areas and faculty offices. Supplementary spaces will develop in the form of nodes such as the present one accommodating the student center, the administrative center and the learning resources center. Arranged on two split levels, these three central areas relate visually to each other.

Structure and Materials:
Exterior walls of brick with sloping metal clad roofs over the 2-story classrooms. Structural steel frame, concrete slab on grade, concrete slab on metal deck upper floor, rigid insulation on metal deck roof construction. Light weight internal wall partitions, some demountable and relocatable. Carpeting in most areas. Environmental air conditioning.
COUNTY COLLEGE OF MORRIS
Randolph Township, N. J.

Architects:
EPPLE & SEAMAN
NEWARK, N. J.

Site:
An area of 218-acres, consisting of fields, woodlands, an 8-acre pond, numerous streams and providing a panoramic view of Morris County's rolling hills. The buildings are located on an open, sloping area and harmonize with the scale of the surrounding community. To preserve the rural character, parking is fragmented into a series of small landscaped lots.

Program:
To meet the needs of area residents and employers by providing educational advancement and career training and by serving culturally and socially the local community. Phase I, 1800 full-time students; Phase II, 3500 full-time students; Phase III, 5000 full-time students. Primary considerations were internal flexibility and external expansion. Total area: 274,300 sq. ft., Phase I.

Solution:
The academic units are a series of modules which link together as the campus expands. Each module is a self-contained academic unit with classrooms, labs, faculty offices and student lounges. A structure that provides a continuous enclosed passage on the lower level houses three different functions. A series of terraces on the upper level provides student gathering places and scenic views from the inner campus. Master Plan: the library is the hub with various academic units in close proximity. Other common-use facilities are placed as "terminating points" to the student traffic flow and as "focal points" for changing spatial relationships.

Structure and Materials:
A palette of fieldstone, pre-cast concrete and dark bronze aluminum fascias. Steel frame construction; foundations and lower level retaining walls of reinforced floor framing of rolled steel sections with metal deck and concrete slab. The primary source of energy is electrical. Design is for an initial 1800 full-time students with future expansion to 5000 full-time students.
Site:
An urban area of 22-acres located in the densely populated Essex Heights section of Newark. Parking for 140 cars on grade, Phase I.

Program:
To design an educational facility which meets the needs of a diverse student body by offering a curricula of multiple programs and levels and which is based on the systems approach in instruction. Enrollment: Phase I, 4,000 full-time with an equal or greater number of part-time students; Phase II, 10,000 to 15,000 full- and part-time students. Total area: Phase I, 495,000 sq. ft.; Master Plan, 690,000 sq. ft. Completion of Phase I, 1972.

Solution:
A multi-level megastructure expressing the educational program which emphasizes the Divisional House Concept. Combines complete facilities for educational and social activities within a climate-controlled environment. An outdoors awareness is created through the selective placement of glass walls and skylights. Roof garden and terrace areas provide the urban answer to the suburban "quadrange". Within this concept, the various curriculum areas, classrooms and related learning spaces, are related vertically and arranged around the central facilities (learning resources center, multi-media auditoriums, main dining area, and administration). All facilities are interconnected and related by the multi-level interior mall area (the forum).

Structure and Materials:
Exterior materials will be brick and exposed concrete in the buff to gray range of colors, complemented by solar bronze glass. Structural system is reinforced concrete two-ray rib flat slab. Heating and cooling provided by an all air, dual duct system using electricity as the energy source.
GLOUCESTER COUNTY COLLEGE
Deptford Township, N. J.

Architects:
KRAMER, HIRSCH & CARCHIDI
TRENTON, N. J.

Site:
Two-thirds of the 260-acre site is flat and of high elevation. This is divided from the remaining 1/3 by a sharp, irregular escarpment, partially wooded and overlooking a basin, almost completely surrounded by woods.

Program:
To provide for an eventual 4,500 full-time student enrollment in the late 1970's while maintaining a close faculty-student rapport.

Total area: 177,270 sq. ft.

Solution:
Phase I, consisting of four buildings — the College Center, the Instructional Center, the Fine Arts Center and the Physical Education Center — is designed as an integrated unit. Additional phases may be in the form of two campuses on the perimeter of the lower basin or in the form of a single campus as indicated on the Site Plan. The location of Phase I campus close to the escarpment permits maximum use of the flat elevated area for athletics, parking and subsequent extension. One of the natural indentations of the escarpment provides a small amphitheater area.

Structure and Materials:
Structural steel frame with concrete slab on grade and rigid insulation on metal deck roof construction. Exterior walls are brick with block back up. The circular dialogue room is poured-in-place concrete. Air-conditioning from multi-zone, roof top units.
MERCER COUNTY COMMUNITY COLLEGE
West Windsor Township, N. J.

Architects:
NOLEN-SWINBURNE & ASSOCIATES
PHILADELPHIA, PA.
DIEHL-MILLER-BUSSELLE, Members of Uniplan
PRINCETON, N. J.

Site:
A large grove of trees provides the only distinguishable physical characteristic on the 300-acres of relatively level farmland. All major parking is grouped into two areas at each end of the street and shielded from view by berms and elevated walkways.

Program:
To provide a campus designed for the student, his movement, studies, leisure and interaction with faculty.

Master Plan: 2500 students.

Total Area: 259,073 sq. ft. net and 415,000 sq. ft. gross.

Solution:
The four academic divisions — Liberal Arts, Math and Science, Engineering Technology, Business — are grouped by discipline into continuous building forms along both sides of an academic street or spine. Faculty offices and student study carrels occupy the ground floors; classrooms, seminars and labs occupy the second and third floors. A wide corridor moves along the street side of all spaces and interconnects with cross corridors which bridge the street and link with other academic divisions.

Structure and Materials:
The basic structural system, monolithic concrete frame and floor slabs, is expressed in the architecture by exposing the cast-in-place concrete of the columns, spandrel beams and of the concrete walls in certain portions of the building. The exterior wall panels between columns are brick. All-electric energy system. Classroom and office areas are air conditioned.
MIDDLESEX COUNTY COLLEGE
Edison, N. J.

Architects:
ECKERT & GATARZ
NORTH BRUNSWICK, N. J.

Site:
Approximately 157 acres of gently rolling terrain overlooking the Raritan River. There are four major groupings of large trees.

Program:
To develop a pedestrian campus in 3 phases for enrollments of 1000, 2500 and 5000 full-time students. Vehicular circulation kept on the periphery of the central campus area. Total area: 123,500 sq. ft. gross. Phase I.

Solution:
In 1966 the College was started in eleven existing buildings, converted for use by 750 students. The new library, Academic-Science and Gymnasium Buildings for 1,500-2,000 students were completed in September 1967. The Administration, Faculty Center, Library and Student Center are centrally located. A sequence of smaller spaces extends from the core area, interconnected by walkways.

Structure and Materials:
Brick, precast concrete, troweled aggregate surfacing and gray tempered glass on exterior. Terrazzo, resilient and carpeted floors, brick, ceramic and glazed block walls with lay-in acoustic ceilings on the interiors.

Library — First Floor
Dante J. D'Anastasio, AIA, a member of the N. J. Society of Architects, has been appointed by Governor Hughes to the State Board of Architects. D'Anastasio was sworn in August 5th at ceremonies held in the office of the Attorney General in Trenton.

D'Anastasio, who heads the Camden architectural firm of D'Anastasio, Lisiewski and Tarquini, is a former president of the West Jersey Society of Architects. Many of his firm's designs, including the Village of Pine Run in Gloucester Township, the state's first Planned Unit Development, have won national recognition. A graduate of Drexel Institute of Technology, he was the chief architect for the Federal Housing Authority prior to entering private practice. He holds membership in the New Jersey Society of Professional Engineers, the National Society of Professional Engineers and the National Association of Housing and Redevelopment Officials.

**Tenth Annual 1969 New Good Neighbor Awards**

DECEMBER 8, 1969
ROBERT TREAT HOTEL NEWARK, N. J.

For Reservations
MISS JUSTER
(201) 623-8359

"Octopus Action—that's what we wanted from our Hubert Industries art tables and storage cabinets," says Professor Ralph A. Vernaccia of Montclair State Teachers College. "With Hubert's experts, we designed all art room equipment ready for student use and within easy reach from just one position." Hubert Industries makes lab ... home ec ... arts and crafts ... dorm and other institutional furniture of Dura/Panel ... solid-mold plastic (Fiberesin) for living comfort, efficient storage and indestructibility. Hubert Industries Roosevelt, New Jersey 08555 (609) 448-0900
Our Technical Division will give you the best kind of advice about all kinds of heating systems and fuel operating costs.

Free.

Oil Heat Council of New Jersey, 66 Morris Avenue, Springfield, New Jersey 07081

(201) 379-1100

We have a thing about safety.)
Would You Believe Separate Contracts Are More Economical Than Single Contracts?

Probably not. And a year ago, you would have had a lot of company. Now, all of a sudden, opinions are changing.

The reason is that a new comparison study of bids taken both ways on 35 public jobs over the past 12 months shows a 7 per cent savings in favor of separate contracts. Total dollar savings to the taxpayer came to nearly $1,500,000!

Big deal? Yes indeed, when you recall that advocates of the state law passed in June 1968 requiring dual bids on public work claimed that single contracts would save the taxpayers 25 per cent of the funds spent on public construction. As it turned out, their estimate was off by 32 per cent!

If you'd like a summary of this study, based entirely on dual bids recorded by F. W. Dodge, drop us a card or call OR 5-6300. It's an eye opener!