

KENTUCKY STATE COLLEGE - NOVEMBER 11, 1967

IERICAN

UILDERS





Get this heating/cooling system into any motel...without reservations.

DISTINCTIVE FACE BRICK Darlington

WOOD MOULD FACE BRICK Bickerstaff Hand Mold . Light . Medium . Dark

MATCHING FACE BRICK All Kinds Try us for a match . 40 Yrs. Experience

Call ... 587-8821/1044 E. Chestnut, Louisville, Kentucky

It's General Electric's ZONELINE system and it provides unequalled design freedom for motels, hotels, nursing homes, apartments and office buildings. Choose any of three basic chassis — cooling only, cooling with built-in electric resistance heating, or Zoneline heat pump. Units are mounted through the wall—high or low—wherever you wish, and controlled by integral or wall-mounted thermostats. A simple touch gives positive, room-by-room control of heating or cooling. A Zoneline system for every need – 208V or 230V application

Regal Glazed . Royal Grays

	COOLING	HEATING
Cooling	6,000, 8,000, 12,000, 15,000 BTU	
Cooling with resistance heating	6,000, 8,000, 12,000, 15,000 BTU	Up to 4.5 KW heat



Call 451-9611 for more information. Or write: General Electric Co., P. O. Box 18813, Louisville, Ky. 40218

Schools for Tomorrow

en years ago the shot heard around the world was the Russian Spudnik. The respective thuds then heard in America were the failures of both our outer space programs and our complacent educational system. An irate American public was informed by critics that a lagging educational system cannot maintain a nation whose existence is undeniably predicated about the educated American. John Gardner, now Secretary of Health, Education and Welfare, was among the voices warning the Educational Establishment that we cannot produce either plumbers or scientists if our educational system is only mediocre. An atmosphere clamouring for change was produced. The public gave impetus to the transformation of America's educational system.

Enabling tools for action came in the form of progressive legislation. Those acts, to mention a few, were the National Defense Education Act, Higher Education Facilities Act, Economic Opportunity Act, Elementary and Secondary Education Act, Manpower Development and Training Act.

In committing additional services to student bodies exploding in numbers, educational boards have found the individualizing of the learning experience to be a welcome change. The Fayette County School System, as noted in several national journals and periodicals, is a leader in the implementation of such a system, that of team teaching, and the commissioning of creative and imaginative buildings which make the new concept a success.

This has been explored in accordance to the egalitarian wishes of the people to allow every student, regardless of background, to pursue the possibility of learning to the extent of his individual abilities. This is accommodated more readily through the team teaching process.

On the following pages, three schools are discussed by their architects. These schools were designed for team teaching. It may be possible that we can see how this comparatively new concept has challenged the involved architects to design for a new day in education. There is stressed in the team teaching approach the variations of growth in a child, from very bright in some areas of thought and action, to below average in others. This is the challenge facing the educators, and, to those of us concerned with youth, a fascinating subject.

4

Lansdowne Elementary School Chrisman and Miller, Architects

hrisman and Miller, AIA, in designing both Garden Springs and Lansdowne Elementary, were exacting in defining the nature of the new structure to house the function of team teaching. They deemphasized the traditional idea of grade level expectations for youngsters of the same chronological age while predicating their thinking around the non-grading concept which implies a focus on the individual and his mental maturity.

"Non-grading," stated Chrisman and Miller, "is synonymous with giving up fixed standards for a philosophy of continuous growth and progress." They indicated that a non-graded school is based on five principles of child growth and development.

1. Each child is unique and has his own rate and pattern of physical, mental, social, and emotional growth;

 Learning is enchanced when each child is placed in a situation where it is possible for him to experience success;

3. All children face certain common "development tasks" and should work at those tasks when they reach the appropriate maturity level;

4. Growth is continuous from the beginning of life until life ceases; and

5. A child possesses different levels of maturity for different skills and abilities.

Those principles have dictated certain responsibilities that Chrisman and Miller endeavored to meet in a style more responsive than that achieved through conventional types of school organization. They stress the responsibility of allowing each child to set his own learning pace and to provide him with valuable learning experience at every "grade level" so to attain this learning maturity. Efforts were made to design for experiences which the child can comprehend in a successful manner and thus move to other levels. This implies movement and the freedom on the part of the child to move as he pleases when he needs a new level of materials. Chrisman and Miller, in following the team teaching approach, designed their building to offer the student an opportunity to work at one level in one area and at another level in a different area if he demonstrates he possesses different levels of maturity for those different tasks.

Lansdowne Elementary's physical facilities were designed with a certain program in mind. The building has two major divisions of classroom areas, the primary section of classrooms and the intermediate section of classrooms. Instead of the traditional single classroom for primary youngsters, this school has combined two classrooms to make one large area. This "double classroom" shares a commons area with another double classroom.



This view shows the sharp drop on the east portion of the Lansdowne Elementary School site. Note that the slope was used to obscure a parking lot both from student and to preserve a pleasant perspective of the building.



A frontal view of Lansdowne Elementary School.



Three youngsters relax at the Lansdowne Elementary School.

SCHOOLS FOR TOMORROW

General Information:

Area of building, 44,341; volume of building, 564,946 cu. ft.; space per pupil, 59 sq. ft.; cost of construction, \$539,350; per pupil cost, \$719.13; sq. ft. cost, \$12.16; cubic foot cost, \$.95; date contract awarded, March 11, 1964; owner, Fayette County School System; Architect, Chrisman and Miller, AIA; Mechanical Engineers, Hugh Dillehay and Associates, Lexington; Contractor, Contractor's Lumber & Supply Co., Lexington.



Multi-purpose rooms lend a flexibility to both learner and teacher in the new Fayette County Schools using the team teaching concept.

ultiple classrooms have been incorporated in allowing necessary flexibility in providing the required programs. Among the several advantages of multiple classrooms is the accommodation for team teachers (teams of two in the primary level and teams of four in the intermediate level). Another advantage is the ease of mixing age groupings and nonegrading. Regardless of where a student is or should be, he will be placed at whatever level he needs and will move into other levels according to his own learning pace.

Several innovations have been employed to facilitate learning in these large areas. In order to control sound, every classroom is carpeted. Acoustical floor treatment has proven much more effective than acoustical ceilings because most sound originates from the floor. Portable teaching walls (book cases and study booths on large casters) will serve as visual barriers and will be used in each learning area. These portable walls will make it possible to screen off any section of the room. When we realize that one supervising teacher and two student teachers have often carried on group work in a single traditional classroom at the same time, we do not believe it is unreasonable to expect two or four teachers to share a much larger area, and probably do a better job of teaching. The program will be characterized by small groups formed on the basis of similar interests and needs. The intermediate "teachers" are seen as consultants in the learning process rather than as teachers.

The commons area is over one-half the size of a standard classroom and serves as a space for small group independent work.

The Midwest Program of Airborne Television Instruction (MPATI) will be available to all children in the school. We feel this media (ETV) provides another opportunity for children to have a better program. The school will have a full-time librarian. She will not have the conventional scheduled library classes. We believe interest in reference and recreational materials cannot be placed on a scheduled basis. The librarian will be a part-time member of all the teaching teams and the materials center (library) is accessible to youngsters when they need it — for browsing during free time, for formal and informal research and reading programs.

Some disappointment may be expressed with the landscaping at Lansdowne Elementary. The continuity of taste upheld so skillfully in the building dissolves with the structure. It is sad that a landscaping budget cannot allow the student the opportunity to carry with them the impression that all school yards are not necessarily composed of stick trees and impoverished grass. The site was developed on a high knoll overlooking the neighborhood. A sharp dropping off at the left rear of the site was utilized as a parking area which is secluded both from the front view and the student looking out of the building. Placing the parking lot in this position preserves the pleasant view of the nearby recreational park.

The building is constructed of load-bearing brick and concrete block walls with a bar joist roof structure. Concrete foundations and concrete headwall beams are used at all exterior walls to stabilize and tie the long walls together.

The major interior finish materials consist of painted concrete block, acoustical tile ceilings, carpet and vinyl asbestos floor tile and painted plaster, and stained cypress wood accent panels.

The mechanical system is a central water system with unit ventilators and all equipment being sized for future air conditioning by adding chillers and condensers to the original equipment. This necessitated insulating all exterior walls and roof insulation beyond the normal requirements. Crawford Junior High School, McLoney and Tune. Architects





Artist's conception of Crawford Junior High School.

SCHOOLS FOR TOMORROW

General Information:

Area, 79,285 sq. feet; cost (contract amount) \$1,468,900; scheduled completion date, July 4, 1968; owner, Fayette County Board of Education; Architect, McLoney and Tune, Architects, McLoney and Tune, AIA, Lexington; Structural Engineers, White, Walker and McReynolds, Lexington; Contractor, Fain & Johnston, Inc., Lexington.

I. THE PROBLEM

THE PROGRAM FOR Crawford Jr. High School called for the planning of a facility serving 1,000 students, to be designed around an educational program prepared originally for Beaumont Jr. High School in the Fayette County system.

Based on the team teaching concept, the building program called for provision of five (5) team teaching areas, each to accommodate 120 students, located adjacent to the Materials Center. Other facilities were programmed for general sciences, foreign language, special education, art, typing, home economics, shop and graphic arts, and instrumental and vocal music. Supporting facilities such as gymnasium, cafeteria and kitchen, and administrative offices were included.

The site selected originally for the project was located between Liberty and Wilderness Roads in the northeast quadrant of Lexington. Due principally to the intervention of planning considerations developing subsequent to the start of design, the site was changed to a location adjacent to Interstate Highway I-75 in the northern part of the City. Rectangular in shape and including approximately 18 acres, the site is oriented with its long axis in the north-south direction, and may be characterized as open and moderately sloping. Access to the site is by means of a project street connecting the northwest corner of the site to Charleston Drive in Eastland Park subdivision.

II. THE SOLUTION

SITE:

BECAUSE OF A RELATIVELY small site, location of the building was determined by the requirement that as much open area be retained for outdoor recreational space as possible. Another factor was a desire to maintain separate school bus and visitor and staff parking. Consequently, the building was located on the north, high, portion of the site, adjacent to access, with bus traffic and parking to the rear and visitor and staff parking to the front. Main building entrances for students and staff are situated on the long side of the building



and are served separately and directly from their respective parking areas. Adaptation to existing slope in the transverse direction to the building is accomplished by broad level terraces defined by transitional slopes which follow the building outline.

BUILDING:

The hexagonal building element, dominant theme in the overall plan composition derived from the clustering of five team teaching areas in the academic wing around a central library and materials center area, leaves one side open for connection to other portions of the building. The hexagon is repeated, in varying size, throughout the building in its various connecting elements. Internally, hexagons are spaced nine feet apart, forming circulation corridors between. Cross circulation is provided at the central administrative core, thus connecting both main building entrances, and again at the end of the activities wing.

Structurally, hexagon-shaped precast concrete columns at the points and centers of the hexagons support a steel joist and metal deck roof system independent of dividing walls and partitions, both expediting "getting under roof" and permitting wide flexibility for future change of interior spaces. Height of the gymnasium roof is increased to provide 17'-6" from floor to underside of exposed longspan joists. Exterior wall construction is 10" facing brick and concrete block cavity wall. A continuous painted precast concrete fascia surrounds the building exterior, and is repeated at the higher gymnasium walls. Assemblies of precast concrete, hexagonshaped exterior canopy units in combination with flat sections connect with the two main building entrances, thus repeating the plan motif.

The building heating and cooling system features circulating hot and chilled water to unit ventilators and fan-coil units. A separate air-conditioning system is provided for the administrative core.

Built-in equipment and furnishing include science laboratory casework, home economics casework, miscellaneous casework for graphic arts and art, and library shelving and furniture.

Southern Junior High School Leon E. Browning, Architect

ducational Specifications for Beaumont Junior High School, the title of a pamphlet published in February, 1964, was the result of extensive cooperative planning involving the staff of the Fayette County Schools; the staff of School Planning Laboratory, University of Tennessee; Leon E. Browning, architect, AIA, and Consulting Architects.

Three excerpts pinpoint the reasoning behind the specifications developed for the physical plant at Southern High School. These are:

"The primary focus must always be the student. His education is the reason for it all."

"When change occurs in method or content of an educational program, different kinds of physical facilities will be needed, an increasing number of people are recognizing the critical importance of the school plant in program improvement. Being fully cognizant of this fact, the educational planners of Fayette County determined to develop a junior high school plant fully capable of adjusting to the changing program demands."

"The junior high school of tomorrow, if it is to serve youth better than it does today, will find pupils at work on individualized schedules in place of class schedules. The individualized approach will be determined by the best known guidance practices and will be geared to the growth and development needs of each pupil. Staff members will serve as consultants and advisors to pupils as well as purveyors of specialized information."

Southern Junior High School is compact, functional, colorful and contains the following areas:

Three teaching complexes, each of which has a total area of approximately 6,660 square feet; 760 square feet of each complex opens to a corridor and contains 240 student lockers. The remaining 5,900 square feet in each complex represents an undivided instructional area with soft floor covering and acoustical ceiling; one teaching complex with a total area of approximately 6,660 square feet; one science complex with approximately 880 square feet, one, well equipped, combination science and biology laboratory of approximately 872 square feet, one, well equipped, biology room of approximately 990 square feet, a photographic dark room, and a science commons area; instructional materials center; home economics department; typing laboratory; music department; art and industrial arts department; physical education and assembly area; food service area; administrative area; service areas.

Southern Junior High School, located on the Wilson-Downing Road and completed in September, 1966, is a prototype of the Beaumont Junior High School located on Georgian Way, Lexington, and completed in March, 1955.

A first was scored in the two junior high schools inasmuch an educational plant with varying innovative de-



A youngster visits Southern Junior High School.

sign was required in accommodating a changing educational program geared to team teaching and a totally non-graded system. In accommodating the team teaching concept, two factors, that of flexibility and compactness, introduced further complexities into the design problem. These factors, in turn, posed other difficulties in providing for 1,000 students in the tasks of individualizing areas within large open spaces without any fixed or movable walls, obtaining desired acoustical effects, and providing efficient circulation with maximum safety and minimum movement.

Open space teaching complex problems were solved by grouping four large interconnecting squares, each containing nine imaginary smaller squares which include seven teaching stations, one resource center and one semipartitioned locker alcove. All teaching stations are grouped adjacent to the resource center which also doubles as a circulatory area.

Sound control was obtained by the use of soft floor covering and acoustical treated ceiling with additional control being obtained by the use of portable module work units (containing book shelves, study carrels and tack-peg board combinations) spaced on an imaginary line between teaching stations.

Mechanical equipment restriction problem was overcome by using a high velocity ducted overhead supply of heated and cooled air, with the space above the suspended acoustical ceiling, serving as the return air plenum.

Window areas were reduced to a minimum for (1) economization, (2) reduce heat loss and gain to a minimum, (3) reduction of maintenance, replacement and sun control, (4) reduction of air pollution, and (5) increase exterior wall areas to gain space for required chalkboards and exitways.

In commenting about Southern Junior High School, Leon E. Browning AIA, said:

"I believe that the use of a minimum amount of fenestration is justified and offers nothing other than occasional visual weather element checks.

"I have found no justification for phobia theories

SCHOOLS FOR TOMORROW



A frontal view of Southern Junior High School.

due to lack of fenestration, if inner areas are orientated to bring about an interesting and comfortable feeling along with the application of good color harmony.

"I find that most school boards will go along with good color selection and placement because color does not cost anything extra.

"I feel some of our boards of education and their staff members are now projecting broader and bolder educational teaching programs and this in turn is challenging the architect to project his imagination and application to the fullest extent, so in essence the present day architect generally is producing better educational type archi-

General Information:

A. Architect, Leon E. Browning, AIA; B. General Contractor, Wm. Teater, Inc.: C. Construction Cost, \$1,108,000; D. Size, 80,000 square feet; E. Site, 20 acres; F. Mechanical, high velocity system of heating and air movement. designed for future air-conditioning: G. Television, educational television provided in plans and specifications; H. Library, all books listed by the American Library Association as basic for a junior high are processed and will be available the first instructional day; I. Total Cost, estimated at \$1,300,000 (includes cost of site, construction cost, equipment, books, materials, and supplies).

tecture. He is utilizing more research methods of material and applications along with demanding more of his various consultants.

"The largest problem facing the boards of education and the educational staff was whether or not the teachers, students, and public would accept new innovations in the teaching programs and the educational facility. This concern was justifiable at the time, but since has proven to be a step in the right direction and certainly has proven to be as economical, if not more economical in cost as compared to some of the stereotype educational facilities of the past."



(1) Teaching Complex, (2) Locker Area, (3) Science Teaching Complex, (4) Toilet, (5) Special Education and Foreign Language, (6) Material Center, (7) Administration Area, (8) Vocational Guidance, (9) Auditorium-Gymnasium, (10) Stage, (11) Shower and Locker Room, (12) Cafeteria, (13) Kitchen, (14) Food Storage, 15) Industrial Arts, 16) Graphic Arts, (17) Arts Department, (18) Mechanical Room, (19) Instrumental Music, (20) Vocal Music, (21) Typing, (22) Home Economic.

Let's Consider Interior Design

by Ken Lloyd, AID, Ken Lloyd Associates, Lexington

An application of the basic elements of interior design, that of scale, size, compatable shape, materials, color and finish, is exercised during the initial planning stage of any job within the nebulous quality called taste.

Today's designers must understand present conditions of society so to create that which is suited to and representative of modern life. His duty is to produce beauty and contentment for the people of his time. The interior designer cannot create by rules alone, for, by that process, he merely struggles in obscurity.

Pythagoras established one of the first rules of scale and relationship which was used for hundreds of years. Today, the trained eye is one of the better judges, for no truly creative designer works by a hard and fast book of rules. The interior designer must know what the addition of a curve or the elimination of ten inches will do to size and scale relationships. He must make many new attempts to change, reshape and reorganize before he is convinced that he has conceived the final approach.

One must bear in mind that design is an orderly arrangement of line, forms, masses, colors, or textures which form a unified composition. There are no rules of real validity for combining these elements. However, custom and habit have established certain principles which produce degrees of satisfaction people call beauty. Interest is primarily attained by the introduction of contrast and movement. A design without features is dull and monotonous. When they are in excess, the effect is comparably disastrous. It is evident there is a lack of unity and an overweening amount of confusion and restlessness. Hence, the designer must introduce the proper amount of contrast and movement in his design in avoiding the extremes of dullness and confusion. It is the designer's task to determine the proper portion of the basic ingredients, always bearing in mind their proper use and proportion

Your superb design concepts need superb interior furnishings

When you're responsible for interior furnishings too, count on Hubbuch in Kentucky to help with:

- complete interior design service,
- visual recommendations, and a
- complete selection of custom-designed sources and elements to express your concept.

hubbuch in kentucky

LOUISVILLE • 324 West Main Street • 583-2716 LEXINGTON • 1127 Commercial Drive • 254-0327 OWENSBORO • 2021 Parrish Avenue • 683-6224





walls and partitions to

custom specifications and

maintain economical prices.

Enlarged facilities make possible the pre-construction of walls and trusses of any building. (residents, motels, apartments,

churches) of any custom design.

Sanford Roof Trusses assure

Our new plant facilities enable us to manufacture



Sanford's Research laboratory in truss engineering is one of the world's finest—we can assist the architect in special truss design.

P.O. Box 18144 4600 Robards Lane 452-2686 Louisville, Ky. 40218

11



comprise the basis of all good design.

In addition a designer's intentions and intellectual caliber must be high. The roots of his knowledge must extend deep into the recesses of human thought and activities of contemporary existence. The motive of any artistic effort must be honest and sincere, uninfluenced by fear, vanity, snobbishness or the desire to produce a false effect.

A designer's art is justified on the basis of its contribution to human contentment. The competent designer's aims include both psychological and practical satisfactions. His decisions must fulfill the purposes of the room and, at the same time, be a pleasure to contemplate as a visual entity. Again, this revolves around the aforementioned and illusionary quality called taste.

Philosophers of every era have endeavored to define taste in its relation to the arts. Their task has been a perplexing one. Dictionaries generalize by stating that taste is a sense which permits one to distinguish artistic ex-

Weldwood[®] Paneling

for architectural installations

Weldwood[®] Doors

custom tailored for every opening

Just two of the fine products available from the world's largest plywood organization



U.S. Plywood Corporation 358 Farmington Ave., Louisville Phone: 635-2675



Joseph & Joseph Architects & Engineers Louisville, Ky.

LOUISVILLE

Where does Architecture end and Decor begin?

It need not happen at all. We collaborate with you for color schemes, fixtures, and furnishings that complete and enhance your interior design. Without obligation, ask for a get-acquainted meeting with the architecture oriented designer assigned to work with you.

HUBBUCH BROS.

E. R. RONALD & ASSOCIATES CONSULTING ENGINEERS 543 South Third Street Louisville, Kentucky K.A.C.E. C.E.C. Hummel, George, & Kleine-Kracht, Inc. Consulting Engineers Design-Supervision-Consultation on Structures and Foundations 3825 Bardstown Rd. Louisville

TO CREATE THE LIGHTING EFFECTS REQUIRED FOR MODERN DESIGN IN ARCHITECTURE SPECIFICATION FLUORESCENT FIXTURES MADE IN KENTUCKY MANUFACTURERS OF LIGHTING FIXTURES FOR OVER 36 YEARS

PHONE 587-6094

LOUISVILLE LAMP CO., INC.

724 W. BRECKINRIDGE ST.

LOUISVILLE, KY., 40203

cellence or the ability to discern fitness, beauty and order.

Taste is a mental quality. It is not intrinsic in the materials used by the designer and its apparent presence is dependent on the emotional reaction of an observer utilizing his intelligence and intellect in viewing the totality of a designer's works. Taste is thus closely allied to the expression of personality.

Taste is not solely expressed by the proper selection of individual features of decoration. It is also evidenced in groupings, proportion and composition. There must be an orderly arrangement of details which suits the function and design of the room and results in a satisfying aesthetic effect. Every object also should be located so that the activities of a particular room may be conducted with convenience. comfort and efficiency. The daily habits and individual needs of those who are occupying an area should be carefully studied. Walls as well as furnishings should contribute to esthetic, psychological and practical requirements. Additionally, related and inseparable elements as architecture, materials, colors and patterns should play their intrinsic part.

Pretentious, ostentatious or vulgar features should be avoided. An innately good design should never depend on added or applied decoration. Honest creativity is governed by the natural properties of a material and proper usage.

Good design is not produced by "packaged schemes" which cannot contain the necessary elements of individuality and taste, or, by the use of manufacturers' suggestions, unity of forms and colors. An insult of considerable magnitude to the public's intelligence is the advertisement of "suites of furniture" and "the" decorator colors for "this" season. The adoption of such conceptions does indeed represent a paucity of intelligence or mental laziness, and no good can result. The manufacturers and the public are equally to blame for this condition.

A room decor should not reflect a self-conscious effort on the part of a designer. Every room should appear natural and mellow and look as though it is used by someone who enjoys it. When the impression of the decorator's hand is too much in evidence, the work does not reflect the taste of his client. Decorative features introduced for the sole purpose of making a startling impression should be used with great discretion. Naturalness is as desirable in interior design as in the personality of an individual. Good design is a component part of charm which captivates by its inherent quality.



The Kentucky Architect 804 E. Jefferson St. Louisville, Ky. 40206 Return Requested

BULK RATE U. S. POSTAGE PAID Louisville, Ky. Permit No. 352

GEORGE E PETTENGILL LIE AMERICAN INSTITUE OF ARCHITECTS 1735 NEW YORK AVE WASH NGTON D.C. 20006





- INTERIOR DESIGNERS
- CABINET MAKERS
- IMPORTERS

For PROFESSIONAL

INTERIORS OF DISTINCTION

A. I. D. MEMBERS

Louise A. Mendel • Julian DePree Willie May Whayne • Don J. Allen

1000 HAMILTON AVE. 587-6612