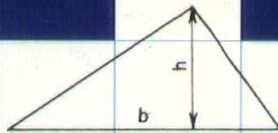
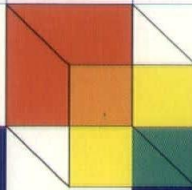


IOWA Architect

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CROSS

1 Acquiring
knowledge

OWN

5 Process of doing
3 Abbreviation for
between earth & sky

1 E d u c a t i o n

Velour Texture
Manganese/Heavy

Velour Texture
Mahogany Color

Velour Texture
Manganese/Fine

Velour Texture
Butte Brown Color

Island Teal

Indian Turquoise

Sandrift

Peach Sand

Highland Heather

Pumice

Frost White Satin

Dawn Grey Mat

Palisade Blue

Mountain Blue

Terra Cotta

Misty Grey

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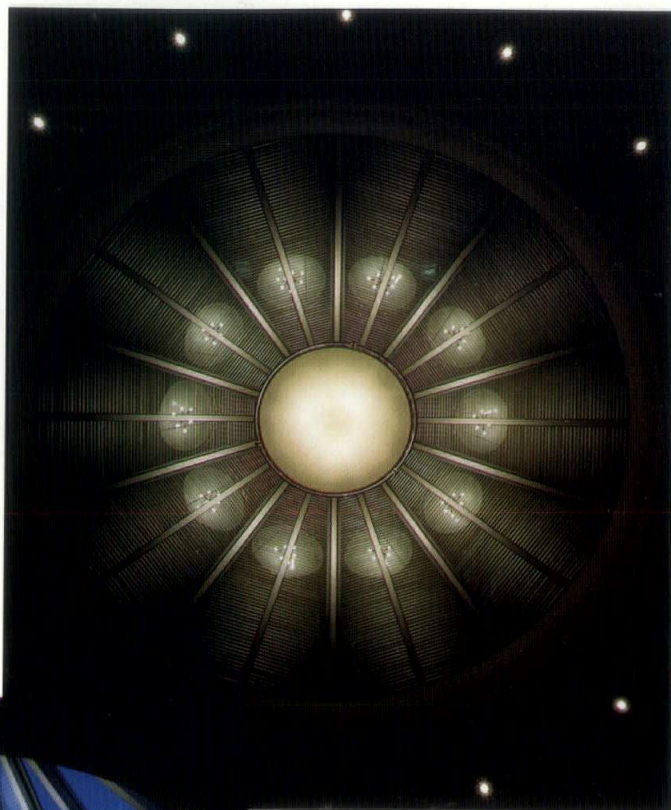
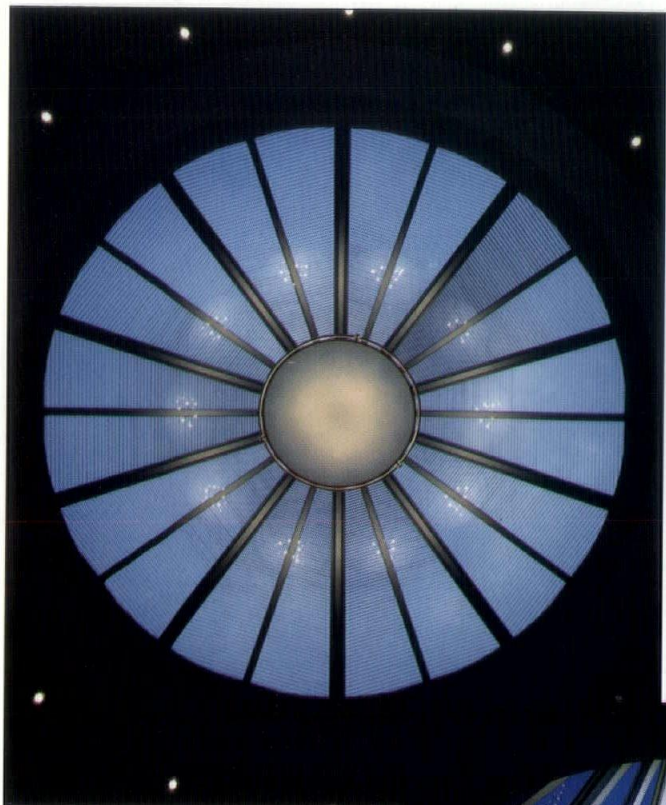
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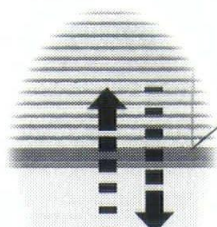
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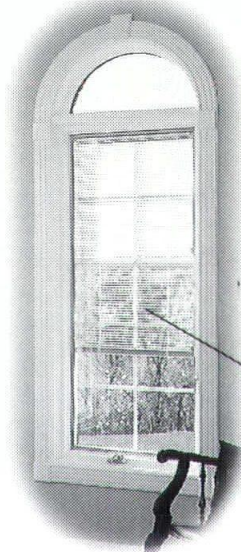
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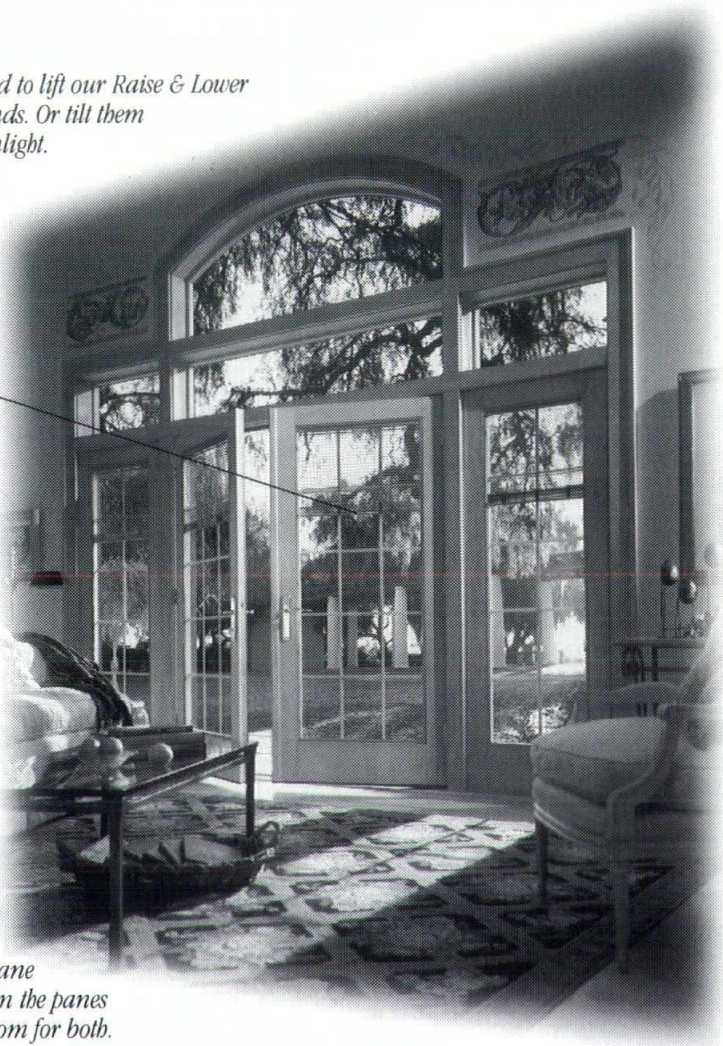


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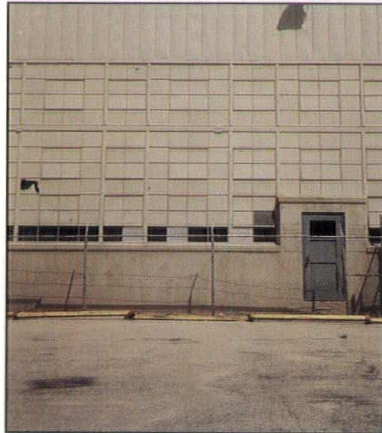


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Architect: Frevert-Ramsey-Kobes Architects-Engineers

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Prints by the Nabis

The Joslyn Art Museum, Omaha, Nebraska, will present an exhibition of 64 lithographs, woodcuts, and etchings September 10 through October 23, 1994. This exhibition chronicles the work of a group of artists who called themselves *Nabis* and at the end of the 19th century, came together under the influence of Paul Gauguin and the Symbolist theories. Included are works by Edouard Vuillard, Pierre Bonnard, Ker-Xavier Roussel, Felix Vallotton and Emile Bernard, among others.

Robert Ryman

A touring retrospective of the work of the eminent American abstract painter Robert Ryman, the most comprehensive exhibition of his paintings held yet in the United States, will be on view at the Walker Art Center in Minneapolis through October 2, 1994. Comprising some 80 works from 1955 to 1993, many of which have never before been seen in this country, the exhibition reveals the subtle variety and sensuality of Ryman's highly reductive work.

Southern California

Southern California: The Conceptual Landscape, an overview of landscape-inspired work created from the mid '60s to the present, will be on view at the Madison Art Center August 13 through November 13, 1994. This exhibition includes works by 26 artists including John Baldissari, Larry Bell, Richard Diebenkorn, Robert Irwin and Edward Ruscha, united thematically by the way in which they interpret their unique surroundings.

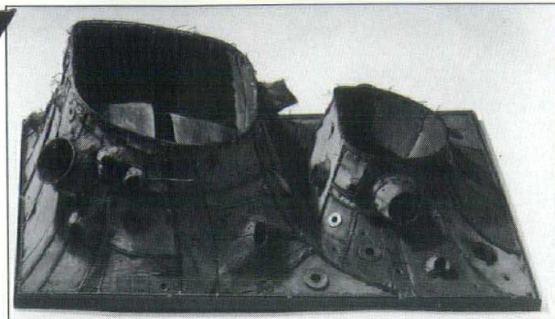
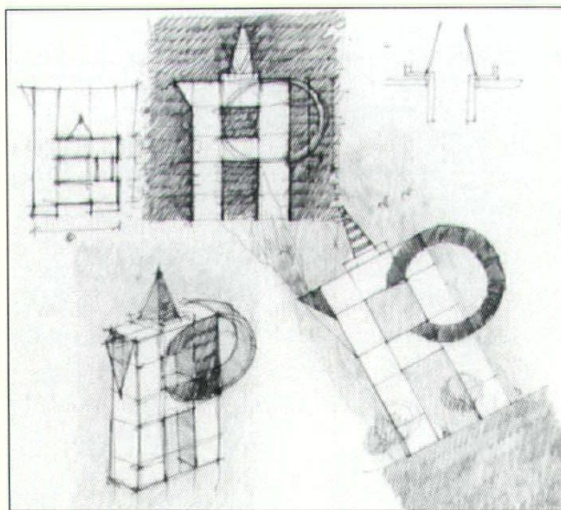
PAUL MANKINS, AIA

ARTS



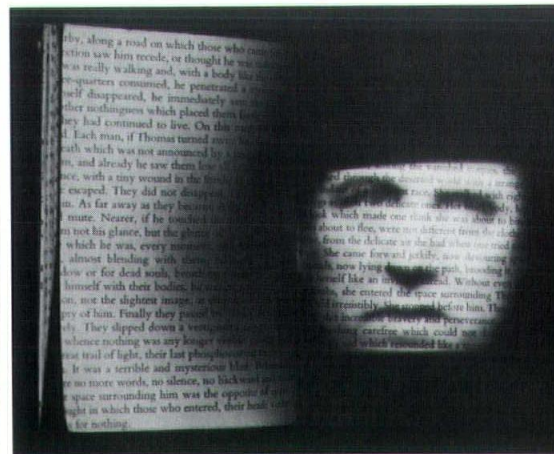
Iowa Artists 1994

The Des Moines Art Center will present *Iowa Artists 1994* August 20 through October 16, 1994. This juried annual exhibition highlights work in all media produced by artists living in Iowa. Included in this year's exhibition is a ceramic piece as well as generative sketches by Iowa City architect Sanjay Jani.



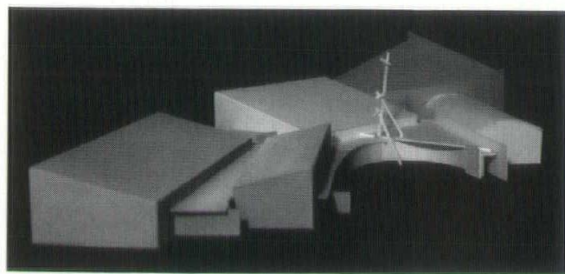
Selections from the Permanent Collection

Three galleries of the Walker Art Center in Minneapolis have been recently installed with a thematic exhibition of great works from the 20th century. *Selections from the Permanent Collection* opened this summer and includes works by such masters as Edward Hopper, Anselm Kiefer, Chuck Close, Dan Flavin and Mark Rothko. As part of the exhibition, the Walker unveiled a singular installation created with 15 Twin Cities teenagers and filmmaker Helen De Michiel entitled *The Listening Project* which provides visitors with creative perspectives on art in the Walker's collection.



Gary Hill

The first extensive survey of Gary Hill's video installations to tour the United States will be presented by the Museum of Contemporary Art in Chicago September 24 through November 27, 1994. The Seattle-based artist has received international acclaim for his work integrating technical complex video with evocative sculpture explorations of visual and linguistic communication.



Walnut Hill United Methodist Church

Walnut Hills United Methodist Church has retained the design services of Architects Wells Woodburn O'Neil for a new structure to be located in Urbandale, Iowa. The design is a response to the various physical aspects of the surrounding landscape, as well as the informal nature of the congregation. A "village" type massing parti recalls the rural farmsteads throughout Iowa and the adjacent Living History Farms. A central "gathering space" serves as the circulation, as well as the organizing, element to which other forms are attached. The building's orientation, materials and immediate landscape are being developed to respond to energy conservation issues. Construction is anticipated for this summer.



Library Addition

Fundraising is underway for a 9,000 square-foot, two-story addition to the Oskaloosa Public Library. Preliminary design by Brown Healey Stone & Sauer is sympathetic to the Carnegie design of the original library. Entry will be through the new structure, which will strive to create its own presence with massing and detailing derived from the original structure. All levels of both the existing and new structures will be handicapped accessible upon completion of the project.

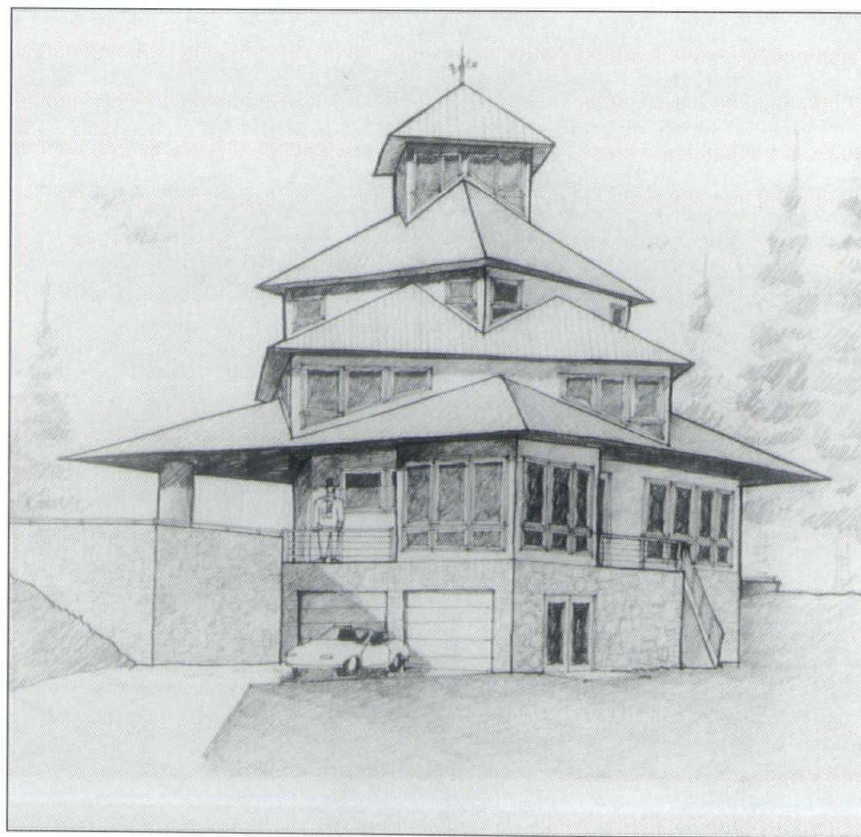


Outreach Center

Huntington Ewing McKinney Architects has completed the design of the Lyon County Outreach Center/Head Start program. Elements of the design are scaled with children in mind. Construction on the 4,200 square-foot structure is scheduled for completion this year.

Iowa City Residence

Construction is underway on the Hoffman/Johnson Residence in Iowa City by William Nowysz and Associates. Inspired by old Russian churches and a medieval tower, the house is a series of four squares concentrically rotated at each floor. An observation tower, accessed by an intricate cage of maple and walnut, is located at the top of the structure. Bedrooms are located on the second floor; living, dining and kitchen are on the first floor; a garage is in the basement. Construction is scheduled for completion this year.



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The times they are a changin'.

When Bob Dylan wrote those words thirty years ago he may not have been promoting education, but he could have been. Rapid advancements in technology and an opening of new global markets are among the many forces changing our world forever. These changes have effected the architectural milieu as well.

This issue of *Iowa Architect* focuses on education, specifically architectural education, as a means of combating the overwhelming power of change. Beginning with the Architecture in the Schools program and continuing through a roundtable of leading architectural educators, we will investigate the way individuals are trained to be architects. In addition, the development of educational architecture in Iowa is discussed, as well as a recent program to help bolster the public schools in Des Moines.

While change is unnerving, it is also undeniable. Education is the only defense and the only means to make today's changes into tomorrow's tools.

**Don't
criticize
what
you can't
understand.**

Paul D. Mankins, AIA
Associate Editor

IOWA Architect

*Our sincere
thanks to the Iowa
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Department of
Architecture and the
Iowa Architectural
Foundation whose
financial support
made this issue
possible.*

education

BRINGING ABSTRACT CONCEPTS CLOSER TO HOME

AIA Iowa's Architecture in the Schools Program

Architecture brings abstract concepts together in a real and visual form, making them easier to grasp. AIA Iowa's built environment education program, Architecture in the Schools, uses architecture to help make some of these abstract concepts more accessible to students.

Luanne Sweeney Baker, a history teacher at Valley High School in West Des Moines for 12 years, used to dread the unit she teaches on the formation of European nation states.

"It's a tough unit to grasp conceptually," she says. "And, frankly, it can get pretty boring pretty fast — for both the students and the teacher."

After attending a staff development course four years ago offered by the American Institute of Architects, Iowa Chapter, Architecture in the Schools (AIS) program, Sweeney Baker devised a creative exercise to help make the unit more interesting. She now asks her students to create an architectural monument that would have had special meaning to the people of a particular nation state.

One student designed a cross-shaped building for the Spanish nation state, with a symbol for the merging of church and state at the center of the cross. Another student constructed two buildings of the same size to represent the equality of the monarchy and the parliament in England.

Sweeney Baker now tries to incorporate the study of architectural styles into all of the historical time periods she covers — from the Greek pyramids to the Roman aqueducts to the churches of the French Revolution. "Architecture tells us so much about the people who create it," she says.

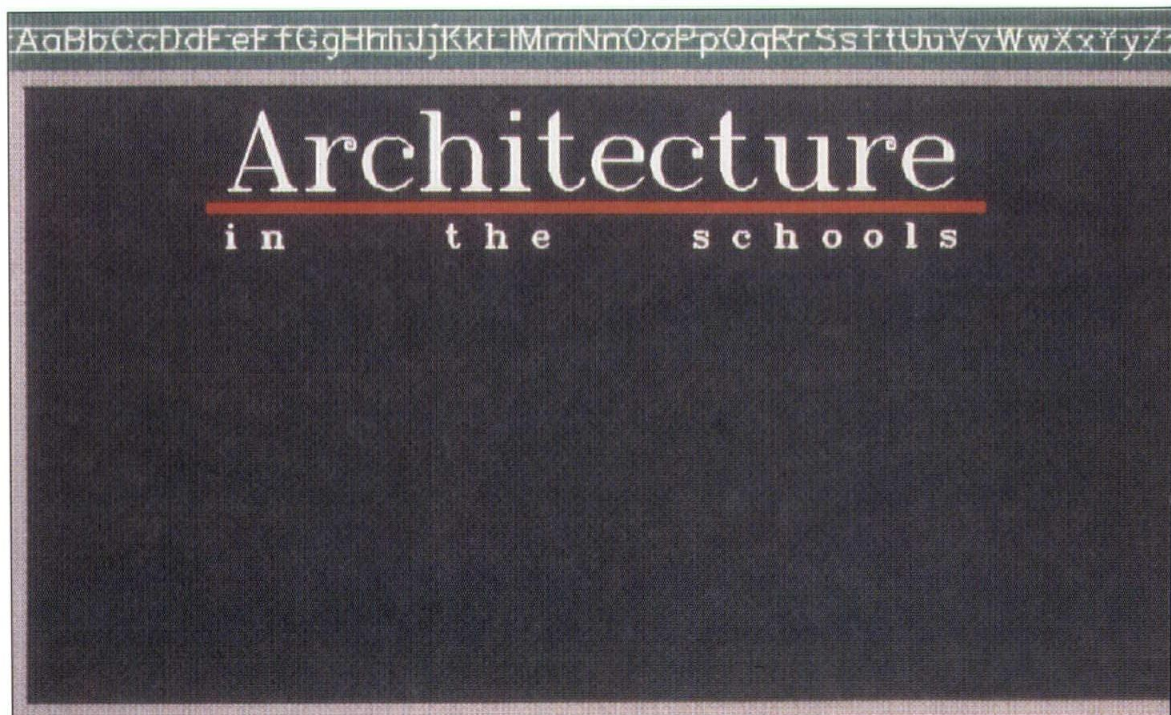
"Studying architecture makes history more real for students than if they were just memorizing names out of a book."

Going beyond text book learning

The example from Sweeney Baker's classroom demonstrates the main thrust of built environment education: going beyond standard textbooks and using architecture and design — an accessible, comfortable, tangible part of everyday living — to teach concepts that might otherwise be difficult to grasp. Because architecture brings abstract concepts together in a real and visual form, exposure to the elements of architecture can help bring some of these concepts closer to home for young people.

The AIS program is a classic model of this philosophy. Now nearly ten years old, the program doesn't promote a separate curriculum specifically "about" architecture (although AIS can offer such a program if requested). Instead, it incorporates architectural concepts into an existing multidisciplinary curriculum for kindergarten through twelfth grades. Educators are shown how architectural concepts can be incorporated into lesson plans for art, home economics, language, industrial arts, math, social studies, history, science — even music and physical education.

(Left) The Architecture in the Schools program, now nearly ten years old, has helped hundreds of teachers and thousands of students across the state incorporate architectural concepts into curriculum. Photo by King Au.



All photos by Barbara Schmidt unless otherwise indicated.

MISSY PETERSON

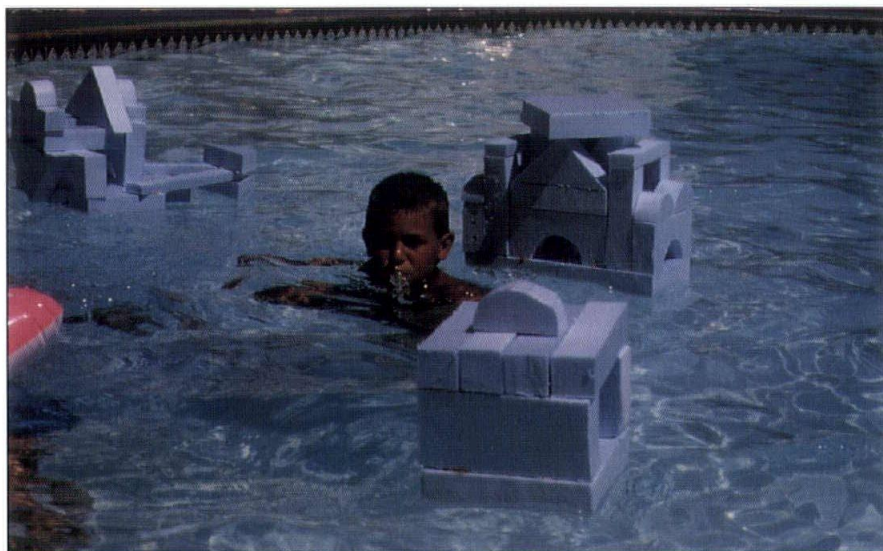
(Right) With help from AIS materials, students from Edwards Academy in Des Moines did a study of architectural styles.



buildings from 1868 to 1992.

The curriculum project has also been taken to the Des Moines Public Schools in a pilot to reach over 1200 students. The project involves connecting the fact (history) to the site (architecture), making history a more visual concept. This curriculum will be part of the third grade social studies unit on the history of Des Moines.

The AIS project is an exciting one for all involved: the members of AIA, the teachers using it in their



(Above) During an AIA Iowa summer meeting at Okoboji, children created a floating city.

classrooms, and — most importantly — the students. Not only do students develop an awareness, understanding, and appreciation of the built environment, they also learn to utilize architectural concepts to enhance learning in other subjects. Teachers throughout Iowa have come to rely on the AIS curriculum and instructional materials. Resources for educators include:

- a 20-minute slide program entitled "Buildings Speak: The Language of Architecture." Available for sale or loan, the presentation is designed to

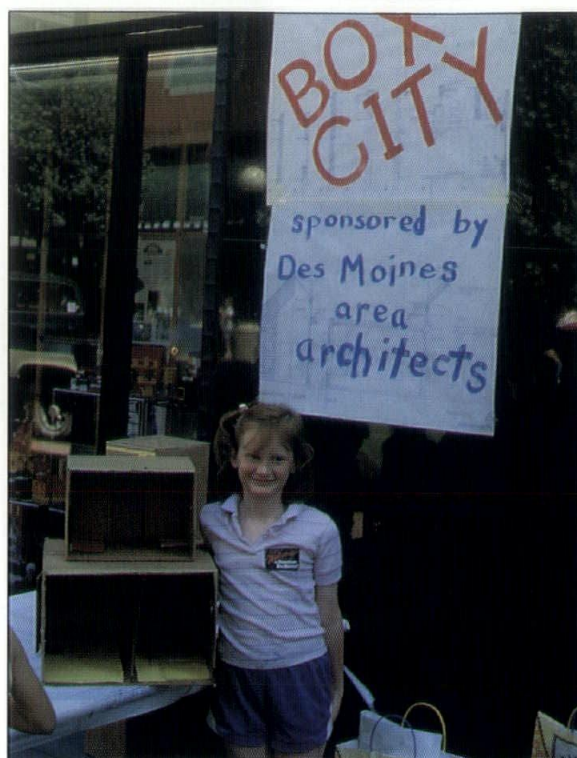
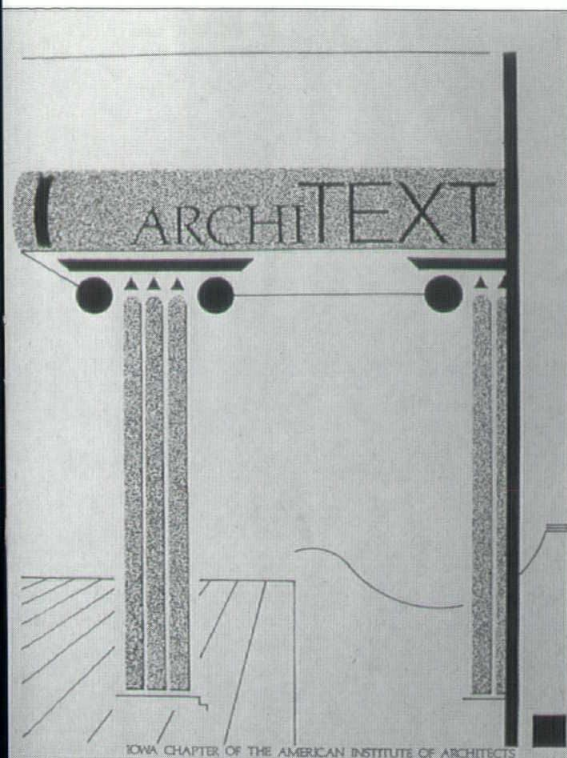
serve as an introduction to the basic elements of architecture — form, scale, texture, color and materials;

- *Architext* (which has been sold in 22 states), handbook of easy-to-use lesson plans, which also includes a resource listing of books, films, and videos;
- a slide presentation entitled "Building Our Heritage: Iowa Architecture 1939-1985," developed in conjunction with the Iowa State University extension service and focusing on seven buildings around the state that reflect the philosophies and social changes occurring during that 50-year time period;
- "Global Influences on Iowa's Architecture," a 30 minute narrated slide program that discusses why our buildings look the way they do;
- a resource library at Iowa Chapter headquarters in Des Moines, and;
- hands-on workshops for teachers throughout the state - the cornerstone of the program. Designed to create a sensitivity to the everyday environment, workshops feature local architects and historians as guest speakers and walking tour guides. A typical workshop lasts two to four days, is available for graduate college credit, and features tours of local museums, historic site neighborhoods, and restoration projects, led by local architects and historians.

The Architecture in the Schools program, which has affected thousands of students and teachers around the state, recently earned national recognition, receiving an award of excellence in the American Society of Association Executives' Advance America Awards Program.

For more information about "Architecture in the Schools," contact Barbara J. Schmidt, Educational Consultant, at 515/277-7075 or AIA Iowa at 10 Walnut St., Suite 101, Des Moines, Iowa 50309.

Missy Peterson is a freelance writer from Des Moines.



(Far left) The AIS program offers *ArchiTEXT*, a resource of lesson plans for classroom use. Photo by King Au.

(Left) Students design and build a "Box City" with help from architects at a hands-on art festival in Des Moines.

(Below far left) Roosevelt High School students study details of their Des Moines school building. Photo by Sue Lewis.

(Below) Historian Ralph Christian leads a walking tour of the Owl's Head neighborhood in Des Moines as part of a teacher workshop.



(Left) Students from Stowe Elementary, Des Moines, lobby legislators in the Capitol rotunda to approve funding for Iowa State Fairgrounds repairs.

THE BRIDGE BETWEEN TEACHING AND LEARNING

Iowa's Schoolhouse Education

As Iowa's schools' needs have changed, the role of architects in school building design has changed as well.

From the first schoolhouse built in Iowa to the studies and proposals for school needs in the 21st century, the changing role of school buildings has, indeed, been an education.

Architects had little involvement in the first half of Iowa's education in school buildings. It wasn't until education turned from teacher-oriented building design to experimentation with designing for learning in the 1960s that architects' influence was utilized to its fullest.

Always a community effort, the construction of a schoolhouse during the first 50 years of Iowa's statehood was architecture based on the limitations of the community. The materials readily available, the construction ability of the community members, lack of

Benches along the wall provided seating; desks came later as teaching materials became more readily available.

As rural Iowa communities became more permanent, so did the school buildings. Communities generally followed a progression of replacement by a sturdier, more pleasing structure as resources permitted and growth in school population demanded. The folk vernacular design of the Iowa schoolhouse grew even stronger as log schoolhouses were replaced by these more permanent structures.

Even though architectural plan books for schoolhouse design had been published and were available east of the Mississippi, the early settlers had little time to put so much effort or planning into the construction. Settlers generally relied on their own preconceived ideas of what a schoolhouse should look like and the resources at hand dictated the construction means. If a brickyard or stone quarry was within reasonable hauling distance, the school took on a stronger folk vernacular look. Otherwise, locally prepared lumber took shape into the newest one-room schoolhouse. If a town could justify the need, a two-story, two-room building was constructed. Such a building, often the largest in town, was an impressive statement to newcomers of the town's progressiveness.

By the 1870s the plan book designs had more of an influence, but the designs were often modified to meet the pragmatic needs of Iowans. Design was still teacher-oriented, with size limited by the range of voice and with a rectangular shape for the presentation of lessons. Lighting was a problem because while the north offered the best lighting, it also exposed the poorly insulated and heated building to the Iowa winters. While many plan book designs showed two separate entrances, the double entrance was rare in Iowa because it was viewed as an unnecessary expense. Most schoolhouses had a single entrance on the south or east, which was the short side of the building.

Vestibules and bell towers didn't become popular until later in the century. The bell tower served as a status symbol of the school, often featuring ornate designs. That was typically the only extravagance of Iowa's vernacular schoolhouses.

With the turn of the century came improved transportation of people and materials, both of which ushered in the consolidation of schools and led to the decline of the one-room schoolhouse. The vernacular schoolhouses were slowly replaced with larger buildings with a mass vernacular influence. Beginning around 1910, new school buildings were constructed of brick and mass vernacular shingles as these materials became more readily available and inexpensive with the use of the railroad.



(Above) Brush College, circa 1860, located in Lee County, was closed in 1959. It was restored in 1967 to circa 1897.

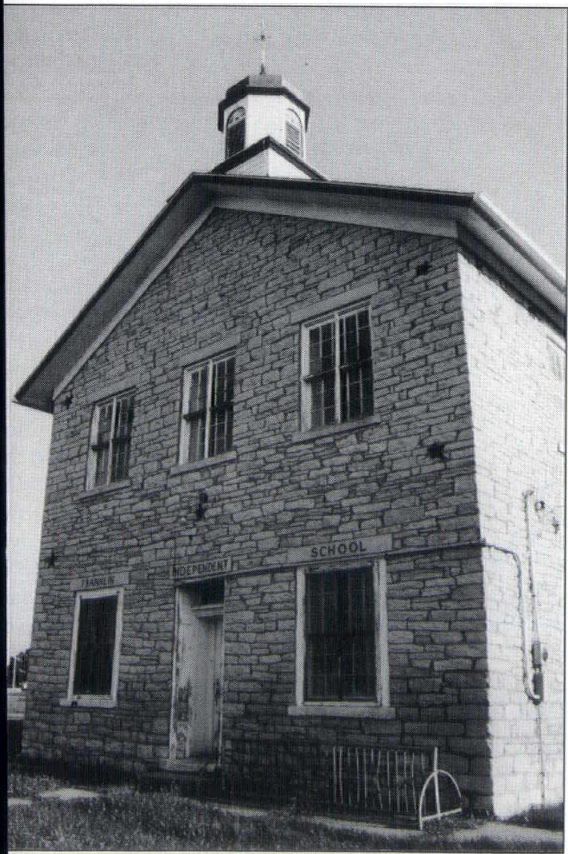
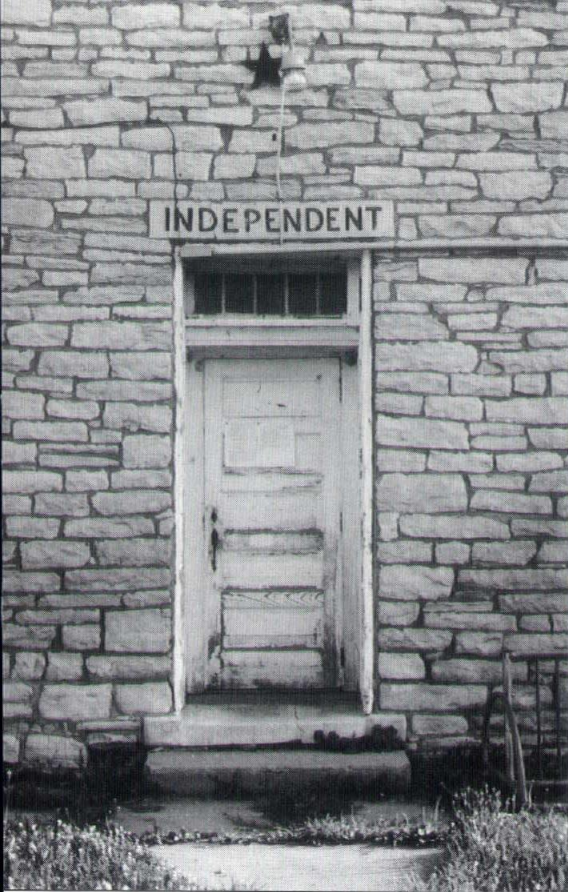
funding, land availability and haste in construction all directly affected the one-room schoolhouses, which were the beginning of Iowa's school system.

The early folk vernacular schoolhouse of Iowa was as nondescript as any building in the vicinity because of its temporary nature of construction and lack of ornamental design. Log schoolhouses weren't considered permanent structures, but were only intended as a start for schooling, to be improved as soon as time permitted.

As early as 1830, the original schoolhouses were constructed with the bare necessities of four walls of crudely cut logs, mud packed for insulation and a rough, untreated wood floor, with oiled paper covering the two or three small square windows. A fireplace on one wall provided heat which kept students nearby overheated and those across the room shivering.

Photos by Claire Seely.

CLAIRE SEELY



The consolidation efforts of the 1920s brought a number of one-room schools into one central building of four rooms with students divided by age among the different rooms and floors. The size of the rooms, roughly 20' by 30', in effect created several one-room schools under one roof.

It wasn't until the second wave of consolidation began in the mid-1940s that real changes occurred in school building design. High school consolidation

focused on combining administrative districts rather than several one-room schoolhouses into one building. Consolidation led to separate buildings for elementary students (sometimes several schools in surrounding towns) and a community high school centrally located within the district.

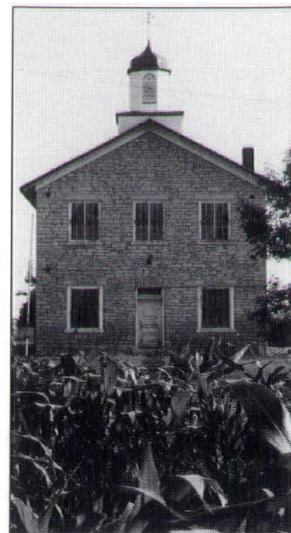
The building of a high school renewed pride in the farm communities of Iowa. The facility had to meet not only educational needs, but the needs of the community. These buildings, built more often with the aid of an architect, took on an industrial building look with a flat roof and tall, floor to ceiling windows. But, unlike earlier high schools, they boasted a gymnasium with a stage, or in some cases, an auditorium which served as the gymnasium, with basketball games played on the stage while the crowd looked on from the auditorium seats.

The onslaught of the Baby Boom Generation led to fast and furious construction of elementary schools in the 1950s. These hastily designed and constructed buildings remained, in theory, a string of one-room schoolhouses divided by grade with, perhaps, a central library space. Ill-prepared for the increase in school population, the districts were generally more concerned with getting the maximum space for their dollars. For many districts prefabrication met the need for maximum space and minimum construction time and cost.

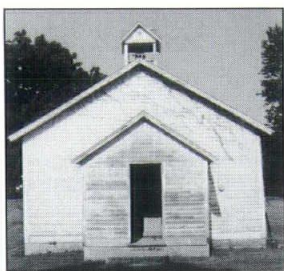
The lessons of the first wave of Baby Boomers taught school districts that with the scale of school buildings required, more advanced planning would be necessary. Building on demand was no longer as easy as assembling local carpenters and erecting a building from a modified plan book design.

As the new wave of students covered not only Iowa, but the entire country, the vernacular school buildings of earlier times were lost in the urgency of construction of the 1950s and the further standardized use of materials. But as the advanced planning for junior high and high schools began, a whole new aspect of school building design opened up. Districts required a building that would meet their needs for over 50 years and would be flexible enough in function to meet the varying needs of its students and the community. Auditorium and gymnasium size were expanded, and even swimming pools became common place in new school construction.

For the first time, administrations and architects had the time to study the needs of not only the district, but the students, curriculum innovations and teaching methods, and the community's demands of the new building. The influence of innovations in curriculum and teaching methods and the permanence of the building had the most impact on the design.



(Above, above left, and lower left) The Franklin Independent School, located in Franklin, Lee County, Iowa, was built in 1873 to accommodate 160 students. It was closed in 1961. The second floor was restored to its original state in 1976, and the first floor currently serves as the Franklin city office.



(Above and right) The Lowell School in Lowell, Henry County, Iowa, was built in circa 1880. After the school closed in 1958, a general store occupied the building until the late 1960s. It now stands empty and is used for storage.

(Below right) A detail of the school's bell tower.



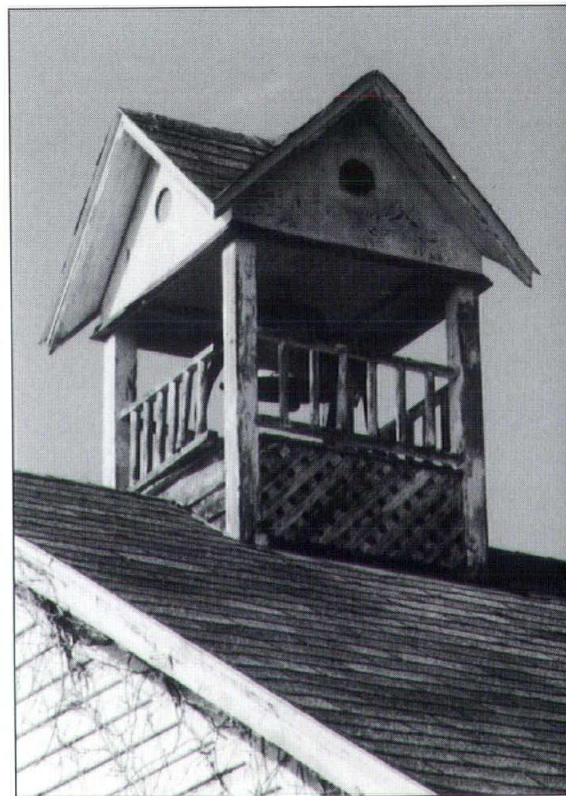
The changes in curriculum led to learning-oriented school design instead of teacher-oriented. This curriculum outlook also contributed to the flexibility of the schools of the 1960s. Portable walls gave educators the opportunity to flow space together or divide it at will. Larger districts took advantage of the trend in divisible auditoriums with the hope that a rarely used space could be easily divided and used for various purposes.

The environment as it relates to student comfort took on new importance in design. Carpeting and air conditioning were introduced into school buildings for the first time in the 1960s.

With the 1970s, under the roofs of the new innovative school buildings of the 1960s, the Iowa school districts began to experience the decline in enrollment when the bulk of the Baby Boomers graduated and the farm crisis took its toll. The shrinkage in enrollment and how to cope with it was as much a theme of the 1970s as growth was for the 1950s. The rural districts that had seen their original 1920s consolidation buildings through the Baby Boomers with additions faced the decline with buildings badly in need of updating to meet the challenges of computer and vocational instruction and demands of environmental considerations like energy efficiency.

The 1980s and 1990s have seen a slight upsurge in new school building, mainly due to population shifts. The shifts from rural to urban Iowa have left vacant elementary schools in rural areas. In the urban areas, shifts from neighborhoods built in the 1950s and 60s to new suburban sites have left school buildings in neighborhoods where the children no longer live, requiring new buildings where the children have moved.

It's been a long, continual lesson for the builders of schools in Iowa. And school is not, by any means, dismissed yet. The new construction and updates to current buildings face architects with the constant



challenge of meeting not only today's education needs, but those of the next 50 years — computer aided instruction and increase use of medical technology — while not losing children and the education in a building designed to meet technological needs.

Claire Seely is a freelance writer from Des Moines.

REMAKING PUBLIC SCHOOLS

Architecture's Social Potential

When a recent episode of CBS' *Sixty Minutes* focused on the six billion tax dollars Kansas City, Missouri, spent on new schools, it cast doubt on the role architects can play in repairing public education. The story played up the fact that after so much money was spent on design and construction, school administrators were disappointed to find no significant increase in students' standardized test scores.

While it is no surprise that educators, as well as the public, want something or someone to blame for the low level of student achievement, the idea that student scores would necessarily improve in new classrooms may not just be optimistic. It may be unreasonable. Yet, such an expectation holds out the hope that architects can help remake the place of public education in this society. And, it is just such a desire to optimize the context, the site, and the environment of learning that is on the minds of architects and their school clients today.

Some of these clients are engaged in self-study to think about their new buildings and to improve future school buildings. As a first step toward learning more about the architecture of West Des Moines schools (which recently spent \$55 million on new buildings), Donna Wilkin, Director of Curriculum for the West Des Moines Community Schools, posed the following question to students and teachers of five elementary schools:

"Imagine you are an architect designing an elementary school. What room would you put the

most time and effort into if you wanted to encourage the students in the buildings to have the greatest opportunity for learning? Why?"

Tabulating responses, Wilkin found what appears to be broad differences between the settings that elementary school students and teachers think are most important. While teachers and first graders want the focus to be on classrooms, the students in the second through sixth grade focus on the media center and computer lab (Figure 1, see next page).

Wilkin's question is intended to raise more questions than it answers — researchers call it a heuristic device. It's intended to act like a magnet, drawing out underlying issues and problems for further study and

Architects are called to design environments that support teachers and teaching. Creative architectural solutions for technical and spatial needs are an architect's opportunity to reinforce the connection between teacher and student.



(Left and lower left)
The Martin Luther King Elementary Magnet School is an example of new attempts by public schools to draw children to an urban setting for their education.



School: Martin Luther King Elementary Magnet School
Location: Des Moines
Architect: Herbert Lewis Kruse Blunck, Des Moines
General Contractor: Big Boys Construction
Structural: Structural Consultants P.C.
Electrical/Mechanical Engineering: Frank Pulley & Associates
Photographer: Farshid Assassi

JAMIE HORWITZ, PH.D.

(Top right) A community college responds to the need for higher education.

Project: Trustee Hall,
Southeastern Community College
Location: West Burlington, Iowa
Architect: Durrant Architects Inc.,
Max N. Schmidt, AIA, Dubuque
General Contractor: Carl A.
Nelson

**Structural, Mechanical,
Electrical Engineering:**
Durrant Engineers Inc.
Photographer: Mark Micunas

(Second right) A centralized commons allows students to interact within the large and diverse educational facility.

School: Storm Lake
Middle School
Location: Storm Lake, Iowa
Architect: Neumann Monson
Wictor Architects, Sioux City
General Contractor: McHan
Construction, Inc.
**Mechanical/Electrical
Engineer:** EDA

(Third right) An interior view of the Pappajohn Building on the University of Iowa Campus, a new structure that includes opportunities for faculty and students to conduct interactive learning.

School: University of Iowa
Pappajohn Business
Administration Building, Iowa-
Illinois Colloquium Terrace Suite
Architect of Record:
Neumann Monson PC, Iowa City
Design Consultant:
Architectural Resources
Cambridge Inc.
General Contractor: Mid-
America Construction Co. of Iowa
**Mechanical/Electrical
Engineering:** Alvine &
Associates Inc.
Mechanical Contractor:
Bowker & Sons
Electrical Contractor:
Meisner Electric
Photographer: Nick Wheeler,
Wheeler Photographics

comparison. It's also a question that leads investigators back to the archives of research literature.

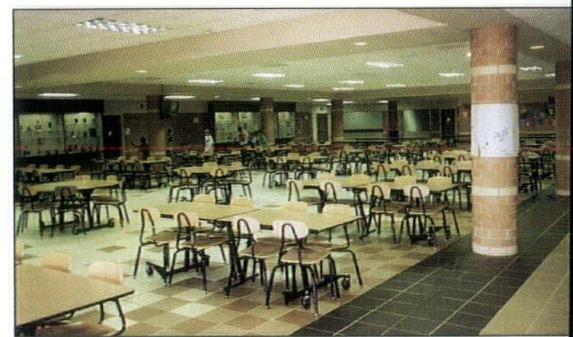
Empirical research on the design and aesthetics of school buildings have, of course, been conducted in thousands of laboratory and field settings across the past century on a wide range of issues. Although environmental research rarely seems conclusive, it has provided some instructive lessons for architects, like the evaluations of the "open space" schools (Giaconia, 1982; Weinstein, 1979), and the studies on the "ecology of big schools and small schools" (Barker and Gump, 1964; Gump, 1987).

Studies of school size have found that in public high schools of 500-800, students have a decidedly better environment for extra curricular learning experiences, largely because students at these small schools are pressed into service, leadership and a wide array of activities to maintain and support their school. As a result, these students come to know themselves and one another in a wider set of roles and in relationship to sustaining their community, not just in relationship to their individual achievement. This research has influenced the "school within a school" design concept in order to invest schools of many thousand students with some of the social and psychological benefits of smaller high schools.

Although the "open space" schools have been widely viewed as unsuccessful, architectural implications of empirical research on this design innovation of the 1960s remain unclear. In brief, while "open space construction," where loft-like activity areas are left undivided by walls or corridors, proved to be considerably less expensive to build, the social costs associated with the accompanying decrease in student achievement and strong dissatisfaction among teachers is thought to offset any advantage.

Given the fact that open space designs were implemented in order to provide new opportunities for individual learning and more freedom of choice for children, it is important to note that many studies find children reporting greater satisfaction and better peer relations in "open" schools. However, none of the studies report an increase in academic achievement (Gump, 1984, p. 162). Researchers have concluded that conventional classroom enclosures are favorable for scholastic achievement after comparing similar students' scores in enclosed classrooms and "open-space" schools.

Two reasons for the unsuccessful experiment with open-space design emerge from the many findings. First, teachers who taught in open schools were not involved in and did not develop programs compatible with their new environments. Instead, they tried to implement traditional programs in schools without walls or corridors. In a similar fashion, standardized



What do children want from their school?

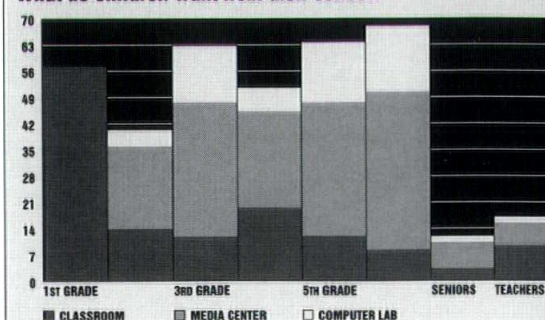
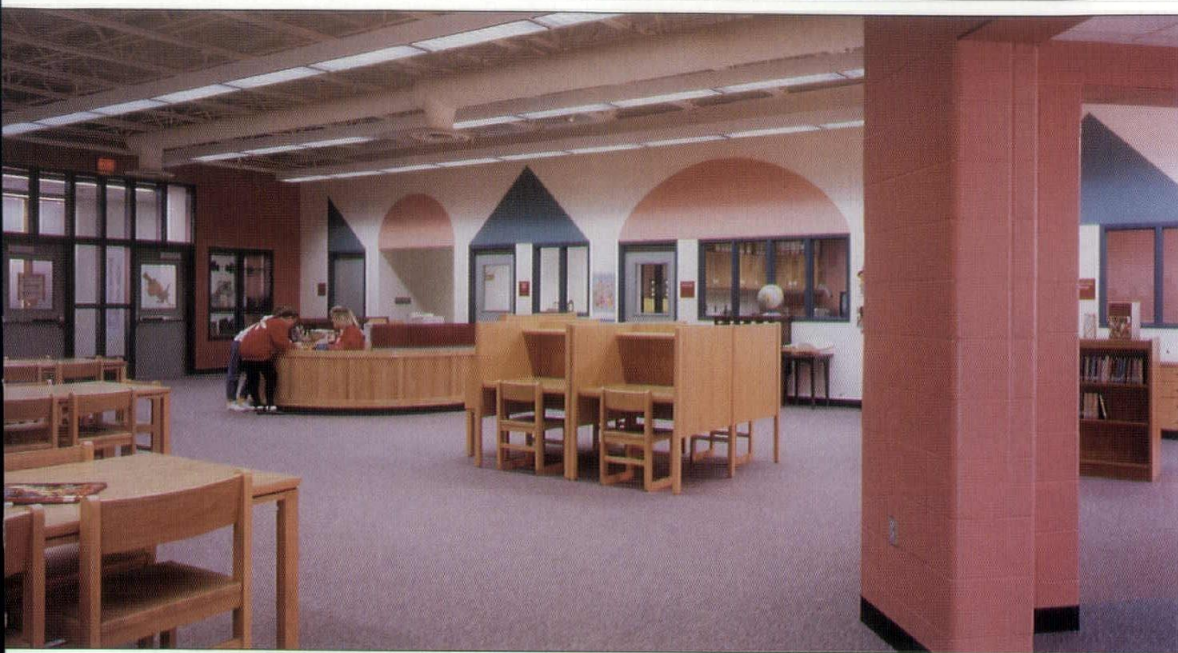


Figure 1



(Left) A media center uses architectural elements to define areas for storytelling and casual reading within the open space planning.

School: Crestview Elementary School

Location: Clive

Architect: Frevert-Ramsey-Kobes Architects-Engineers, P.C., West Des Moines

Consultants: Farris Engineering, James W. Wilson, P.E.

General Contractor: Walter, Inc.

Mechanical Contractor:

Sweeney Mechanical

Electrical Contractor: Des

Moines Lighting

Photographer: King Au

(Far left) As the progression from rural to urban in Iowa continues, new facilities that consolidate districts and provide needed technological updates are being constructed.

School: Louisa-Muscatine Elementary

Architect: Wehner, Pattschull & Pfiffner, PC, Iowa City

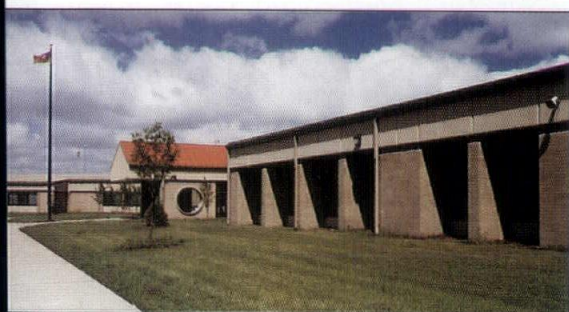
General Contractor: Hy-Brand Industrial Contractors

Mechanical Contractor: Tyan & Associates, Inc.

Electrical Contractor:

Merit Electric

Photographer: Roland Wehner, AIA



achievement tests did not change in format or substance when school buildings changed. Secondly, audio and visual stimulus transmitted through the open spaces" were not a positive motivation for all students and teachers. Instead, some were "driven to distraction" and literally defended themselves against excel stimulus by setting up physical barriers and retreating rather than expanding into their new environment (Weinstein, 1977).

As school clients seek ways to improve academic achievement by emphasizing computers and management over facilities (Branch, 1994), the architecture community plays a critical role interpreting the past and envisioning the future of school buildings in an increasingly dispersed and information linked society. My reading of the research literature and my "reading" of the social power of architecture today leads to few recommendations.

First, it is time that school buildings express their support for teachers and teaching. This means designing the spatial and technical supports that optimize teaching effectiveness from a teacher's point of view. It is also time that school buildings respond to the substance (not just the form) of educational curriculum, and act as exemplars of environmentally sensitive and sustainable design. Recognizing that the goal is improving academic achievement, architects should also focus discussion on better schools and not just new buildings. By helping educators rethink the potential of windows and window sills, rooftops, basements, yards, etc., as learning sites, architects can help make public education.

The visual power of architecture may appear as direct as any image or screen. But the social power of



architecture is always indirect, mediating the connections between people, and between people and the natural environment.

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(Above left and above) The Downtown School provides K-3 education for children in a setting that is easily accessible to working parents and responds to children's needs.

School: The Downtown School
Architect: Denny Sharp, AIA, FEH Associates, and Dan Sloan, AIA, Baldwin White Architects
General Contractor: Taylor Ball
Photographer: Gary Townhouse

(Above) Light and colors are common throughout the Downtown School to provide visual stimulation and a backdrop to the learning process.

ENVISIONING EDUCATION

Des Moines public schools and 50 volunteer architects examine educational facilities for the 21st century

In an ingenious attempt to plan for the future of education, Des Moines' architects joined with the public school system to create a look at the future.

It was an architect's nightmare: a client with more than 500 people participating in the design, no budget and an inflexible timeline.

However, rather than a disaster, the result was a visionary look at how public schools should be designed for education in the 21st century.

Led by nearly 50 architects who volunteered more than 3,600 hours of their time, the Des Moines Public Schools recently undertook the most comprehensive look ever at their schools. The Vision 2005 project (so named because a student entering Des Moines schools in the fall of 1993 would graduate in the year 2005) entailed creating a "vision school" for each of the district's 62 buildings, including elementary, middle and high schools.

Working with a "School Based Council (SBC)," a committee made up of parents, teachers and administrators from each school, a volunteer architect came up with a design for that school. In some cases, the design called for demolishing the existing school and replacing it with an entirely new building. In others, sweeping changes were made to the building. And in a few recently built schools, only minor modifications were planned.

"We asked school based councils and the architects to respond to a 'template' that idealized the vision of the school of the future," explains Bill Dikis, FAIA, a partner in RDG Bussard Dikis, which led the volunteer efforts. "The founding concept was to create a parity of educational opportunity across the school system so that the school closest to you, no matter where you lived, had the same quality as other schools in the district. But at the same time, we very much wanted

each school to maintain its own special identity."

The results were wonderfully varied, and occasionally startling. From inviting media centers to redesigned classrooms to improved community facilities, the architects' plans envision Des Moines schools that are resources for neighborhoods as well as educational centers.

"Working with the SBC really went very well. I probably spent more time on it than I ever anticipated but we treated it just as we would a real project," says Kirk Blunck, AIA, whose innovative plans for Hanawalt Elementary on Des Moines' west side included a new science center and the option of an outdoor amphitheater and nature walk in a heavily-wooded deep ravine that makes up the school's eastern border.

Hanawalt, which sits on a postage stamp-sized site, was originally built in 1914, had a major addition in the 1970s, and presented a true challenge. But Blunck said it turned out to be an enjoyable one.

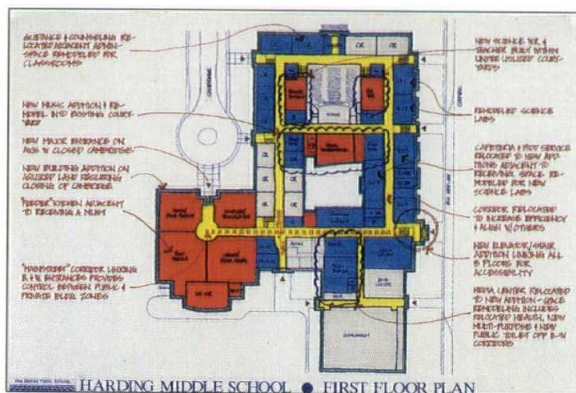
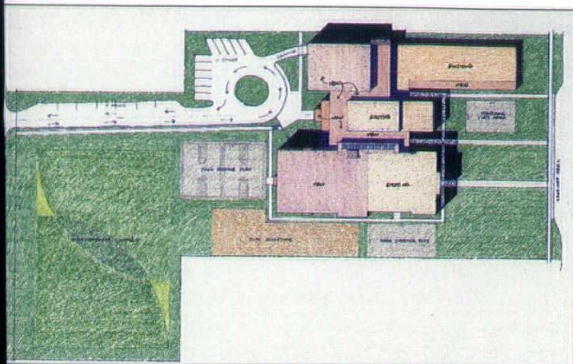
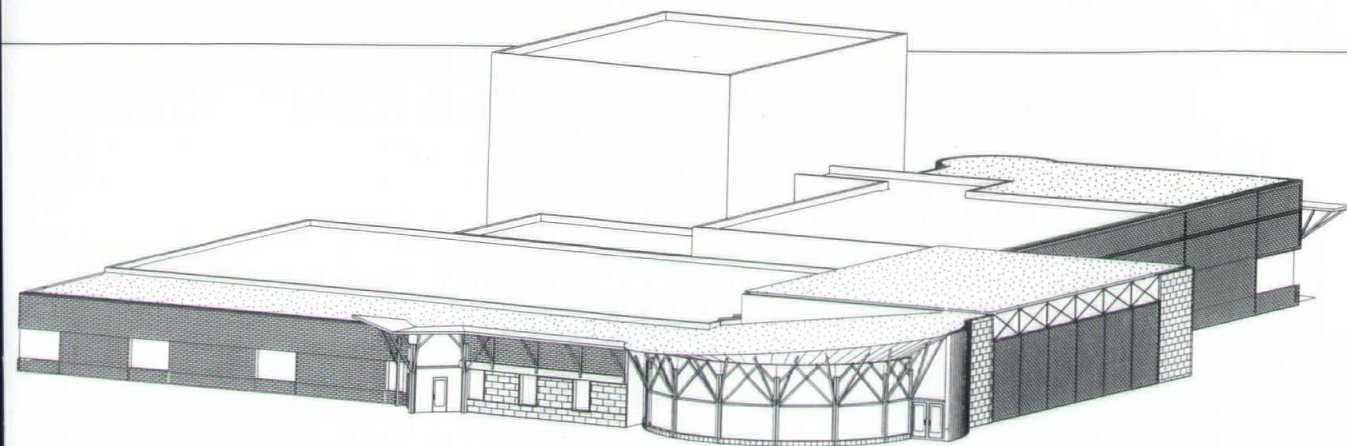
"The site of Hanawalt is one of the smallest and about a third is unusable because of the ravine, so the question was how to turn that into something that is unique and becomes an asset to the school. We were



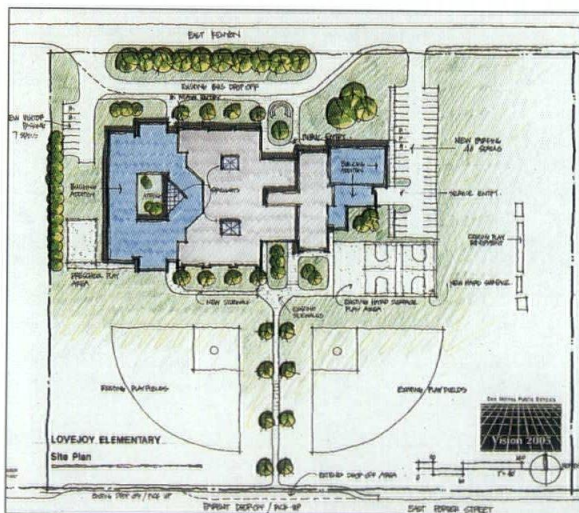
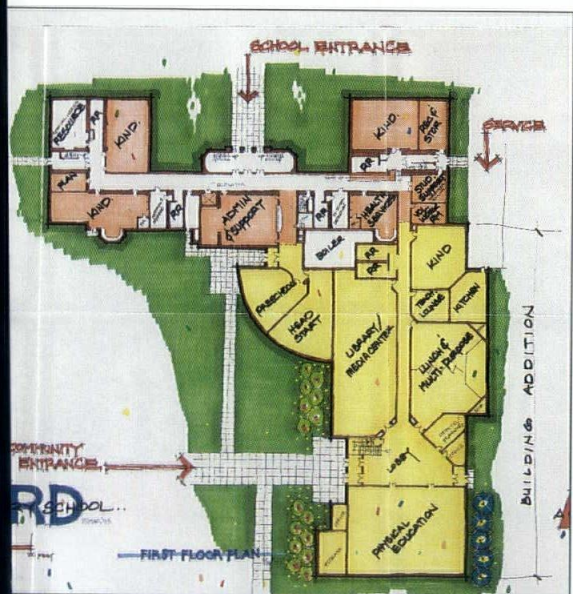
**(Right above and below)
Discussions between
architects and School Based
Councils led to the
development of future plans
for Des Moines schools.**



ALAN K. CUBBAGE



(Clockwise from top) Future plans for: Hanawalt Elementary, Herbert Lewis Kruse Blunck; Harding Middle School, Frevert Ramsey Kobes; Lovejoy Elementary, Architects Wells Woodburn O'Neil; Willard Elementary School, FEH Associates; and Greenwood Elementary, RDG Bussard Dikis.



trying to turn a negative into a plus using a little creativity with a dose of reality," says Blunck.

The work of the volunteer architects enabled the school district to get a jump start on some preliminary design and work says Earl Bridgewater, associate superintendent for management services. But more importantly, it provided a focal point for the members of each school based council.

"Vision 2005 would not be the dynamic and ambitious plan it is without the architects' willingness to add form to our schools' visions," Bridgewater says. "We greatly appreciate the architects stepping forward to help not only the school district, but the community."

The district now faces the challenge of turning the vision into reality. Original estimates for completing the work contained in the Vision 2005 plans were upwards of \$350 million. By contrast, the most recent school building bond issue passed by Des Moines voters in 1988 was for \$15 million. A special

committee is examining financing options, including an income tax surcharge and local sales tax option, as well as traditional bond financing methods. In the meantime, other members of the Vision 2005 Committee are laying the groundwork for financing and marketing the project.

Dikis says his firm has begun work on "refining the vision so we can bring the desired scope of the program in line with a funding strategy for it." That work includes examining each of the schools on an individual basis to determine if the plans are feasible.

"It's a big job, no question about it," says Cathy Talcott, co-chair of the Vision 2005 Committee. "But I honestly believe that if we continue to work at it and move forward, we can change not just the physical structures of the schools, but how we educate our children."

Alan K. Cabbage is volunteer chair of the communications committee for the Vision 2005 project.

STUDIO EDUCATION: THE RELEVANCE OF FULL-SCALE PRODUCTION

Two Iowa State University Projects

As teaching practices mark a shift in the direction of architectural education, from the training of architects to the education of professionals, the introduction of full-scale production reveals the interdependence of design activities including production, construction and representation. Not intended as a primer for mimetic activities found in professional practice, construction or academia, the pedagogy of full-scale production encourages exploration while exposing students to the complex nature of the discipline.

Before I go any further however, I should explain exactly who I mean by an architect; for it is no carpenter that I would have you compare to the greatest exponents of other disciplines: the carpenter is but an instrument in the hands of the architect. Him I consider the architect who by sure and wonderful reason and method, knows how to devise through his own mind and energy, and to realize by construction, whatever can be most beautifully fitted out for the noble deeds of man...To do this he must have an understanding and knowledge of all the highest and most noble disciplines. This then is the architect.

—Leon Battista Alberti, *De Re Aedificatoria*

Almost every period of architecture has been linked on to research into construction. The conclusion has often been drawn that architecture is construction. It may be that the effort put forth by architects has been mainly concentrated on the constructional problems of the time; that is not a reason for mixing things. It is quite true that the architect should have construction...at his finger's ends...but he should not vegetate there.

—Le Corbusier, *Vers un Architecture*

While the above passages from Leon Battista Alberti and Le Corbusier frame a dialectic that opposes

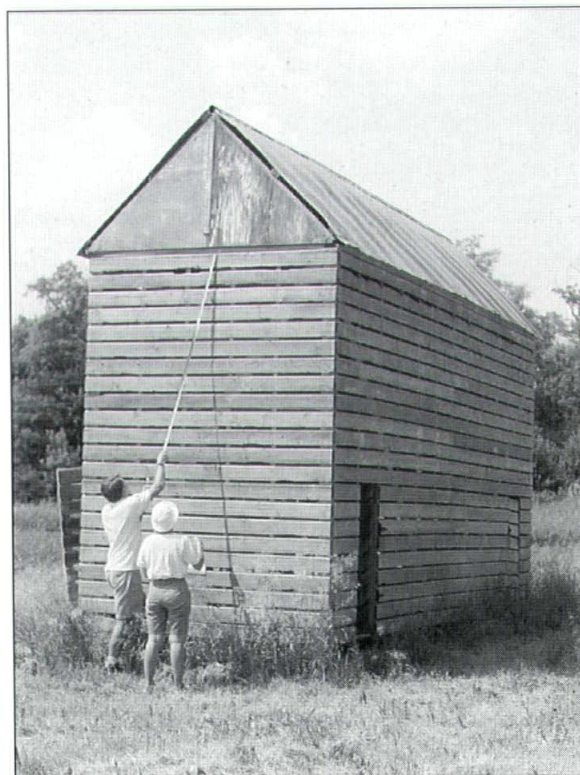
architecture and building, the studio projects described herein place full-scale production at the center of design studio practices. Evident in Alberti's text is the effect that drawing had during the period of the Renaissance, separating acts of design from acts of construction. On the other hand the words of Le Corbusier reaffirm the modernist paradigm of creative genius operating within the singular space of artistic production.

Although separated by nearly five hundred years, these statements share a common ground: the definition of architecture in techniques located outside of its production. Yet history records numerous examples of full-scale production¹ and contemporary practices continue to expand its use.

This article and the accompanying photographs provide evidence a pedagogy located at the intersection of design, including production, construction, and representation. The nature of architectural production within that space is both practical and poetic: building and architecture. As an armature for the education of architects, techniques of full-scale production allow students to explore issues relevant to the discipline as well as the professional practice of architecture.

(Right) M. Arch. students at Iowa State University began the Corn Crib Project with the construction of a series of record drawings documenting the existing structure and site context.

(Far right) Aspects of light, view and enclosure experienced from the interior of the corn crib provoked discussions of building structure, material, and form as related to the program of storage.



WILLIAM F. CONWAY



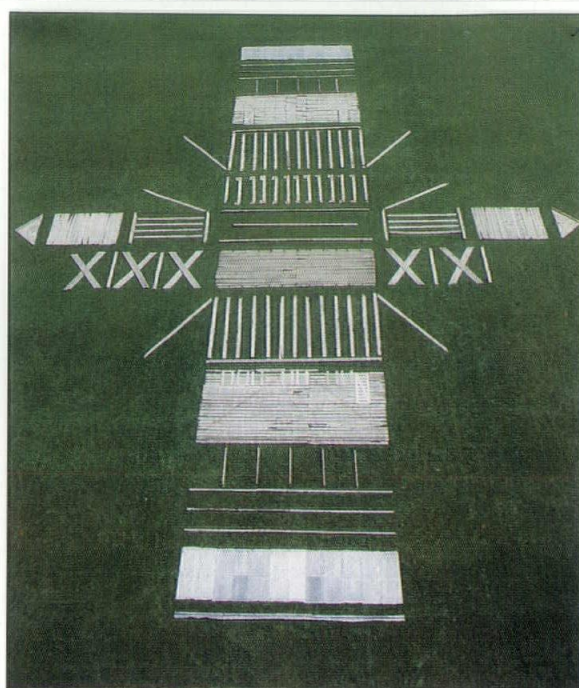
Studio Project #1: The Corn Crib Project: An Architecture of Storage

Executed by students enrolled in the first semester of the 3½ year M.Arch. program at Iowa State University, *The Corn Crib Project*, Summer 1992, was designed for students who had not been previously exposed to architectural education. Working with a prototypical Iowa farm structure, the single-bay corn crib, students began by drawing a series of maps, recording the building and its position on the farm site. With the maps as a reference, the students then devised a strategy for the disassembly of the corn crib. The process of disassembly engendered discussions of structure, form, material, detail, and meaning as the students studied the building and its constituent parts. The disassembled building parts were then transported to a grassy site adjacent to the Design Center on the Iowa State University campus.

With this site as a work surface, they then repositioned the building parts, effectively constructing a full-scale "drawing" of the unfolded three-dimensional structure. The design exercise that followed required that students produce schematic designs for a new storage structure using only those materials that remained from the original corn crib. Given their choice of three potential sites, the students provided personal artifacts to be stored within their newly-designed structures. Following the final design review, students and critics selected one of the student projects for construction. The final weeks of the semester were dedicated to the design, development and full-scale construction of the project.

Studio Project #2: Information Exchange, Communication Exchange, Body Fluids Exchange

A collaborative teaching exercise with Professor Matt Fisher, the fourth-year design studio, Fall 1993, explored the complex relationship between site and production in the development of the architectural project. While Chicago's central business district served as the site for the studio



(Far left) As strategies for disassembly were devised and revised, discussions involved issues of building structure, material production and selection, construction methods and sequencing.

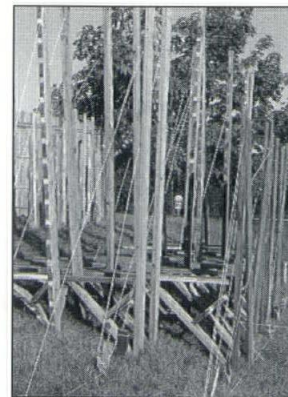
(Left) Viewed from above, elements of the disassembled corn crib are used to construct a "site drawing" at the Iowa State University campus.

projects, the students were asked to consider the design studio as a "site of production," employing techniques of full-scale production. In the accompanying projects, the problem of multiple sites (site of production, site of construction) is addressed through the construction of a "parallel condition." Informed by the philosophical notion of parallelism "whereby mind and matter, though independent function together in parallel, but without an interactive causal relationship,"³ the parallel condition was construed as an architectural construction positioned between the (distant) site of construction and the (local) site of production.

Bringing together studies in drawing, model, detail, and ornament projected for the distant site, the parallel condition also records design initiatives and responses framed by the specifics of the site of production (design studio). Neither a mock-up intended for the site of construction nor the representation of a displaced site, the parallel condition is a constructed collection of studio-based initiatives responding to physical, material and experiential conditions. Built on the lines that mark the shared boundaries of the students' personal space, the constructions offered opportunities to form collaborations negotiating design decisions, construction responsibilities, and methods. It is through these active processes of design that production, construction, and representation intersect in the space of the parallel condition.

As the processes of drawing and construction are conjoined, disjunction's endemic to design are revealed, interrupting the false perception of architecture as a seem/seam-less activity. Design as an isolated activity is contravened as students negotiate the interdependent practices of design, drawing, production, and construction. Strategies of full scale production redefine design as a transformative process allowing strategies of signification to be reinscribed within the acts of making fundamental to architecture.

A design studio pedagogy that utilizes full-scale production envisions the architectural studio as an active space of production and debate. Both



(Above) Chosen by a panel of students and critics, the storage structure designed by Isabella Ocean was constructed at full-scale by studio members. With the addition of tensile cables to the material of the disassembled corn crib, the project proposed a nesting place for birds and passersby.

(Right) In the fourth year project entitled, "Information Exchange, Communication Exchange, Body Fluids Exchange," Mitchell Squire's wall construction is a parallel condition that negotiates between the site of construction (Chicago) and the site of production (studio). Photo credit: King Au.



architecture and the education of architects, are informed by the conjunction of intellectual and material processes. By shifting the methods of design education from the dispensation of finite information to encouraging inquiry, full-scale practices recognize individual initiatives as the studio engages both the problems and the possibilities of architecture.

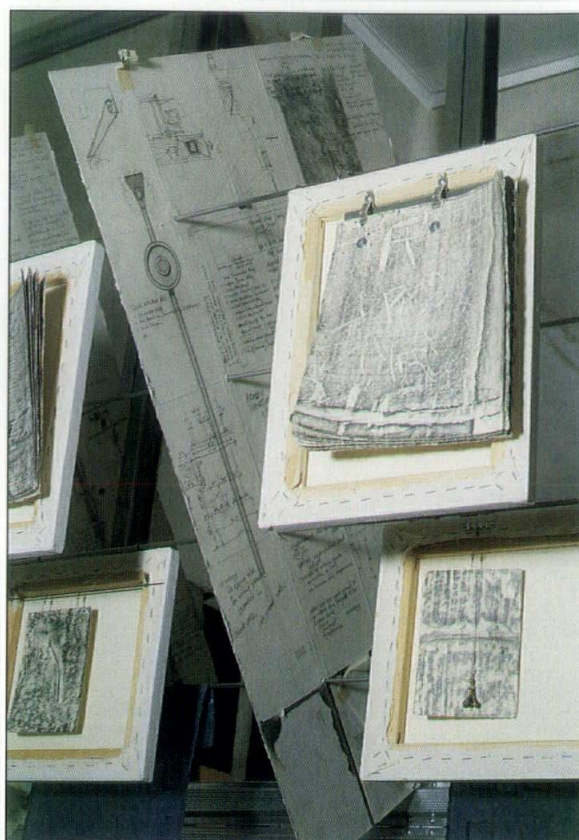
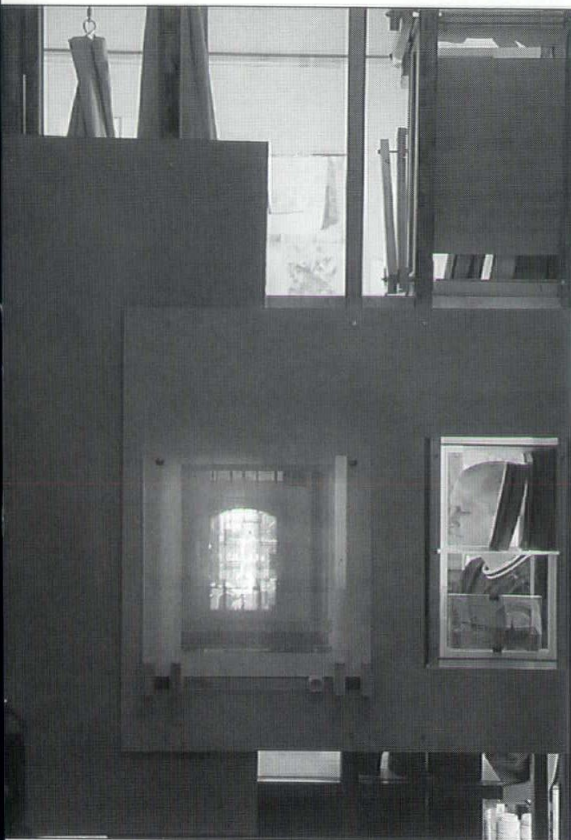
With a reliance on the simultaneity of practices including writing, drawing, construction, negotiation, debate, disassembly, revision and reconstruction, the studio experience demands that traditional relationships of authorship/authority be reexamined. Student collaborations establish effective "learning cells," forming bases of shared knowledge that presage design team practice typical in the professional realm. Likewise, the role of participating faculty member is recast as participant/facilitator, encouraging debate and aiding research. In his article entitled "Design and the Pedagogical Text (Excess Baggage)," Robert Segrest describes the activity of the teacher as one who "... floats in this asymmetrical pedagogical space as a practicing intellectual and as an intellectual practitioner with the agency, not the authority of theory."⁴

Practices of full-scale production are difficult practices. Beyond the execution of on-site work and techniques not usually found within the context of traditional design studios, the pedagogical direction of the work challenges accepted methods of evaluation and dissemination. The work is temporal. Constructed as a vehicle for studio research it is dissembled, removed and recycled at the end of the semester. Rather than prioritizing mimetic practices, the pedagogy of full-scale production intends to instill confidence through exploration as students engage the interdependent processes of production, construction, and representation. Resisting the often singular demands of traditional academic, professional office, or research laboratory models, the pedagogy of full scale production is focused instead on the complexities of the discipline.

William F. Conway is Assistant Professor and Coordinator of Graduate Programs in the Department of Architecture at Iowa State University.



(Above) Marking the boundaries between shared studio space, the project records collaborative initiatives specific to the studio site while proposing examples of urban amenities (restroom facilities, voice mail and newspaper exchange) for transient Chicagoans. Photo credit: King Au.



Notes:

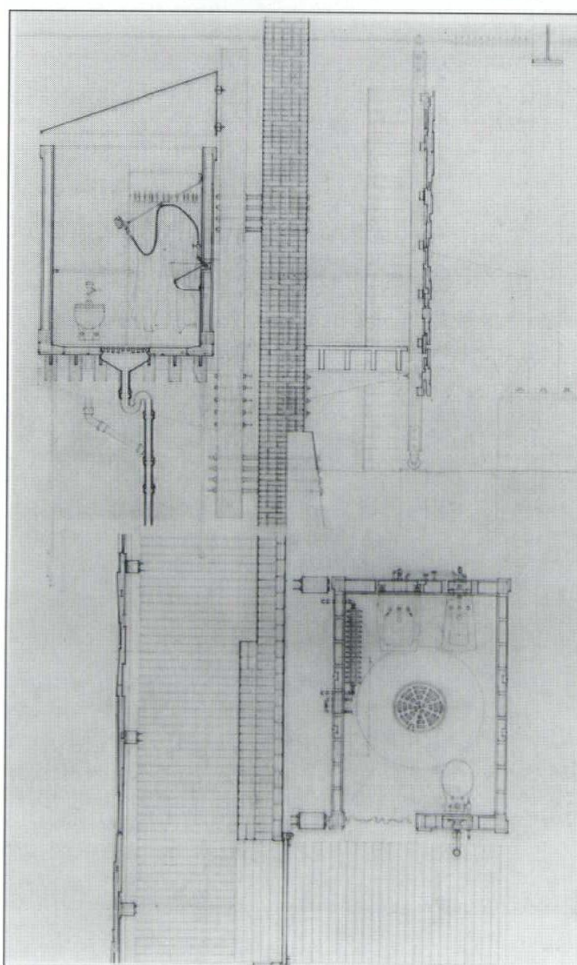
I use the term full-scale production to include mock-ups and studies at the scale of construction including the "parallel condition" discussed later in this article. Architects have long used their studios/homes as testing sites for material, structure, detail, ornament, etc. (i.e., the residences of Alvar Aalto, Richard Neutra, Frank Gehry, etc.). It is common practice in the design of high rise structures to contract professional testing companies to construct and test full scale fragments of building assemblies, (building skins, glazing and doors) for heat resistance, water permeability, and structural integrity.

A short list of texts relevant to the history of production and technology include: Cecil Elliot, *Technics and Architecture*, (Cambridge: MIT, 1992), John Fitchen, *Building Construction Before Mechanization*, (Cambridge: MIT, 1986), and Marc M. Angelil, "Technique and the Metaphysics of Science," *The Harvard Architectural Review* 7, (1989) p. 62-75. A short list of contemporary architects and designers using various processes of full-scale production would include: Charles and Ray Eames in *Eames Design*, Neuhart, Neuhart and Eames eds. (New York: H.N. Abrams, 1989), Frank Gehry in *Frank Gehry, Buildings and Projects*, Peter Arnell and Ted Bickford eds., (New York, Rizzoli, 1985) and Herzog and DeMeuron in "Herzog and DeMeuron, 1983-1993," Alejandro Zaera, *El Croquis* 60 (1993): p. 17.

David B. Guralnik, ed. *Webster's New World Dictionary*, (Cleveland: The World Publishing Co., 1976)

Robert Segrest, "Design and the Pedagogical Text (Excess Baggage)," *Journal of Architectural Education*, (1994), vol. 47, no. 4, p. 13.

Photographer: William F. Conway unless noted otherwise.



(Above) Providing personal enclosure while proclaiming occupation, an unfolding bookshelf/screen mediates between the private workspace of the writer and the public realm of the library stacks in the thesis project by Marcello Pinto.

(Above, far left) In a fifth year thesis project in 1994, Marcello Pinto employs a thickened wall construction as parallel condition exploring questions of appropriation, inhabitation, and adjacency in Chicago's Harold Washington Public Library.

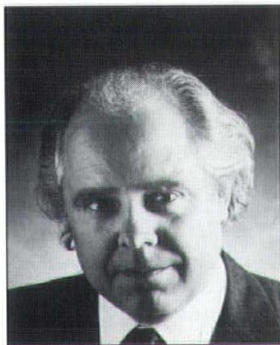
(Above left) A detail from the project by Mitchell Squire reveals the interdependence of design practices at the intersection of production, construction and representation.

(Left) A detail of Mitchell Squire's drawing for the Studio Project #2: Information Exchange, Communication Exchange, Body Fluids Exchange.

CONVENTIONAL CONCEPTS

Notes on Design Education and Practice

AIA Iowa welcomes to this year's convention on September 29-30, 1994 four outstanding academicians and practitioners: Michael Rotondi, AIA; Thomas Beeby, FAIA; R. Nicholas Loope, AIA; and Lars Lerup. Each will present his work as well as a unique perspective on the future of architectural education. Three local voices: Mark Engelbrecht, AIA; Robert Segrest, AIA; and Gregory Palermo, FAIA; are directly influencing the future of education and practice. Their perspectives affect the relationship between current academic theory and the future of professional practice.



Mark Engelbrecht, AIA,
Dean, College of Design, Iowa
State University

(Right) Marcello Pinto,
5th year option studio Paris
Prize competition

Many of my students and colleagues know that I am fond of referring to the commentaries of St. Thomas Aquinas on "time" when discussing "design." St. Thomas remarked that in general conversation everyone, including himself, certainly knew what "time" was, but, when asked its character specifically, he did not know. So, it seems, we might typify our shared relationship with this matter of "design."

To defend against ambiguities, we often take comfort in identifying or defining "design" by its result, or product, much as "time" is conveniently represented by an orderly arithmetic. As architects, we hand one another "design awards," which, of course, are draped around buildings, and we refer to a small part of our effort as "design," presided over by "designers." I prefer to refer to design as a particularly effective way of thinking. The design mind is trained to use the full range of its rational and intuitive facilities to apprehend, evaluate and order a complex set of realities toward some particular purpose. Much of this process is fully accessible to reflection and reason, but a great deal is not. The latter is cloaked in mystery and, I suppose, marks us as given to artful inspirations and answerable to muses. The important point here is that I shy from identifying "design" by its artifacts, and focus on the realities of "design" as a way of thinking. I believe this approach to the matter of "design" is helpful to us in specific terms, i.e., the issues of practice, education and architecture, and in a more general way as well.

Some months ago, I had the privilege of spending some time with one of our distinguished colleagues. A principal of a large practice had long ago given up daily contact with the "designers" in his firm and turned his attention to other matters. Among his latest interests was the development of a housing project. My friend was particularly enthusiastic over his approach to financing the project and remarked that he was more excited with this bit of work than much of what he had been doing within the practice over the past years. His enthusiasm probably was due to the fact that he was once again "designing."

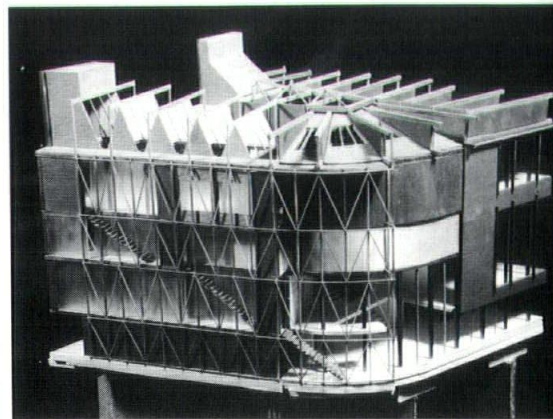
Pursuing this line of argument further, it becomes clear that "design," as a way of grasping and ordering reality, operates throughout any architectural office and at every level. The "design" of a contract governing client-architect collaboration, or the "design" of the close-out on a particularly complex project requires, to my mind, those same methods that inform "designers" as they begin work on schematics.

If we properly credit "design" as a disciplined melding of rational and intuitive thought, it becomes apparent that these shared methodologies form the basis for an integration capable of linking the

freshness of student in the Department of Architecture to the most seasoned project architect. Not only does this approach clearly justify our pedagogy (the studio is a necessary means to develop a pattern of thought), but it also militates against the traditional disjunction between school and practice because we are all enmeshed within a design culture largely defined by method.

This proposition also links us to our colleague whose purposes, or products, vary from ours, but share in work propelled by the process of "design." The College of Design at Iowa State University was envisioned according to this logic. Unhappily, the promise of a heady, cross-disciplinary collaboration among its newly gathered faculties has not yet materialized, and I believe it accurate to presume that a part of this partitioning within the Design Center as well as the design community at large, can be traced to the convention of identifying a design-based discipline by its product rather than its process.

I am sensitive to the necessary prerogatives of the artifacts of each design-based discipline, as well as the particular professional realities and responsibilities that must necessarily differentiate one curriculum and practice from another. Still, the larger challenge seems to me bound to this issue of recognizing, defining and properly crediting that which connects us all. This shared way of thinking, this methodology, this "design," does create a common field and provides for the essential and necessary collaborations between school and practice, student and architect, architecture and its sister design-based disciplines, and finally, the design professions and the world. And in this world, where tasks and torments multiply in seemingly geometric proportion, "design," as a human capability, must be ever more in demand. Our response to this challenge cannot be restrained by convenient conceptions of what we are about.



THE ROLE OF A SCHOOL OF ARCHITECTURE

Comments on Education

What is the proper role of a school of architecture? In its simplicity the question is dreadfully incomplete. Yet, time and again, we are asked by others, as we ask ourselves, for a correspondingly simple answer that anchors our part of the academy to our constituents, our colleagues and our community. In its various forms the answer is the definition of mission, the framework of a strategic plan, and the direction of growth. In its purest form this act of self-definition is a statement of confidence in the future of the profession and the discipline, of architecture as a cultural institution. I want to explore some possible answers and, in doing so, to also unfold the question itself.

Architectural education is first a field of connected, multiple intentions. As an institution these intentions are networked and put into play as a structure of practices, only some of which are located within the academy. Intentionality marks the uniqueness of this network. Education is a process of "becoming" and, implicitly, the process of becoming an architect is defined by what an architect is or should be. The question of a "proper role" is first a question of propriety (of good behavior), of property (of ownership), and of appropriateness (of good fit). In other words, it is a question of the ways in which the idea of the school is vested in the idealization of the architect. But perhaps the proper role of the school is paradoxically not to maintain properness (good behavior, ownership, good fit) but to question these properties" and, in doing so, to participate in the continual, necessary redefinition of the institution itself. The school is a forum for questioning its own existence.

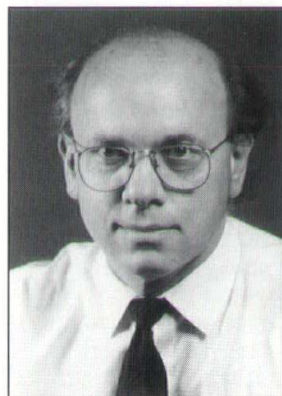
An architecture school is also a place, an ambivalent architecture that is both a place apart and also an intimate part of its cultural environment. As a place of isolation the school affords the most special of sites — the locus of contemplation and extended creative

discourse. But the ground of the academic grove is also continuous, spatially and temporally, with other realities. The academic place is and must be uniquely multi-dimensional, configured by paths of theoretical exploration as it is by the immediate necessities of the social, environmental and economic life. In the academy the practical and the theoretical are intertwined.

Within this multiplicity a particular set of relations — of school to profession, student to professional, professor to practitioner — is perhaps the most emphatic and the most difficult to delineate. These relations define the term "professional school" and in the normative time line of professional development architectural school is taken as a zero point. A career in the profession originates there and, from there, the student-graduate-apprentice goes on equipped with the necessary but limited baggage of the novice. But complexity invades here as well. The time line is not so linear, the connections are not one way, and there is a lot of looping and back tracking in the education of the architect. Perhaps the school is, or should be, a kind of relay station at which exchange, resuscitation, transferral and reciprocity are the guiding processes.

The role that is characterized by multiplicity, reciprocity and managed complexity must also manifest positions that are both ideological and practical. These positions are the common institutional language of the place and they are the codification of its intentions, but again, there is little that is singular and a priori. The role of the school is to frame and nurture ideas and to see the possibilities as well as the effects of actions. If there has been a singularly visible, and for some disturbing change in the nature of architectural education in the past generation it is here. The dominance of a doctrinaire and unquestioned modernism has been displaced by a busy marketplace of theories and methods that are, in turn, a reflection of the diverse and unpredictable circumstances of design and construction. Though we are far from an environment of "anything goes," we are much closer to an acceptance of critical choice as a necessary ingredient in the design process.

If there is a common denominator in this depiction it must be lodged in the relations between a changing



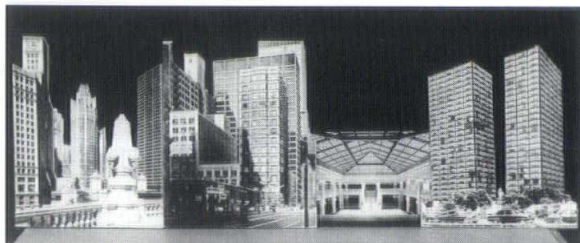
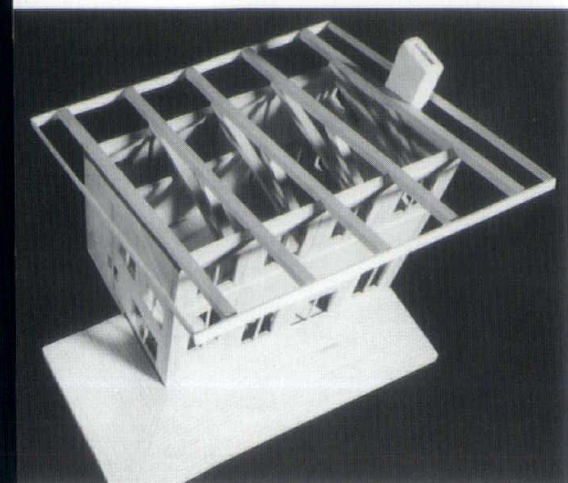
Robert Segrest, AIA,
Chair, Department of
Architecture, Iowa State
University

Teaching is a type of practice, and through practice we can learn and teach quietly. The artificial boundaries between education and practice are provisional, like all other boundaries that separate the whole world in which we act, know and see, into parts.

—Michael Rotondi,
AIA, Director,
SCI-Arch

(Far left) Chad Scheckel,
2nd year, primitive hut after
Thoreau's Walden

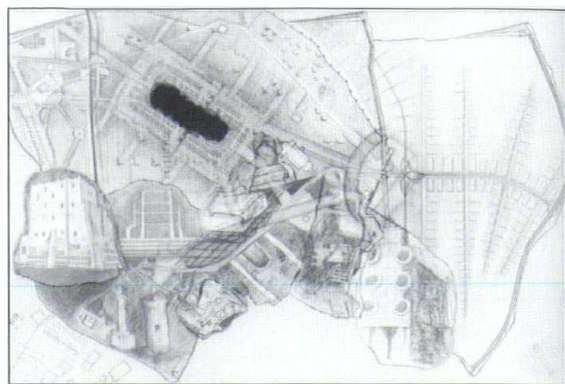
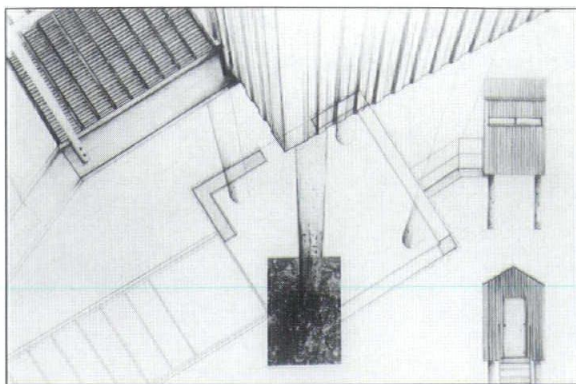
(Left) Jeff Blossner, 4th year
Chicago study



ROBERT SEGREST, AIA

(Right) Alan Pickett, 3rd year memory storage, South Duff flood plain, Ames

(Far right) Tim Schroeder, 4th year foreign study Rome site analysis



profession and a changing academic discipline. The effectiveness of critical thinking and of design ultimately emerges from a common and reciprocal discourse in which three conditions are crucial. The first is collaboration. Architecture is substantially defined by a form of intellectual work — design — and physical work — construction — that are manifest in a social artifact — the building. Changing conceptions of design and construction are at the center of changes in the nature of the profession and the discipline and the nature of these changes is significantly in terms of the way collaboration — “working together” — takes place. Design and construction are by now essentially multiple and interactive and the development of an architect’s ability to understand, execute and explore these modes of collaboration is a compelling objective in education.

Secondly, the school must be sustained by a commitment to continual socialization. I mean this in the broadest sense. The legitimacy of a professional school

is grounded in its capacity to incorporate the changing needs and opportunities that are the currency of any society. We must be acutely sensitive to these phenomena and we must project our students and ourselves as critical agents in their pursuit and resolution.

Thirdly, the school must be a medium for the construction of values. The attribution of values — aesthetic, social, economic and otherwise — to architectural work remains the essence of our pedagogy. At the same time design is the process of critical thinking and creative making in which the consideration of values, often competency, is implicitly necessary.

The sum of these conditions is a unique form of academic institutions, itself an integral part of the overlapping institution of architecture, that generates and instills a kind of social intelligence (architecture and a way of thinking and acting (design) and, in doing so, empowers people as agents of that intelligence, as architects.

AMERICAN ARCHITECTURAL EDUCATION — A RISKY GLOBAL MODEL?

Comments From a Retiring President



Gregory S. Palermo, FAIA,
President, National
Architectural Accrediting
Board September 1993-
October 1994

This year as president of the National Architectural Accrediting Board (NAAB), I conducted visits for architectural education program evaluation and accreditation.

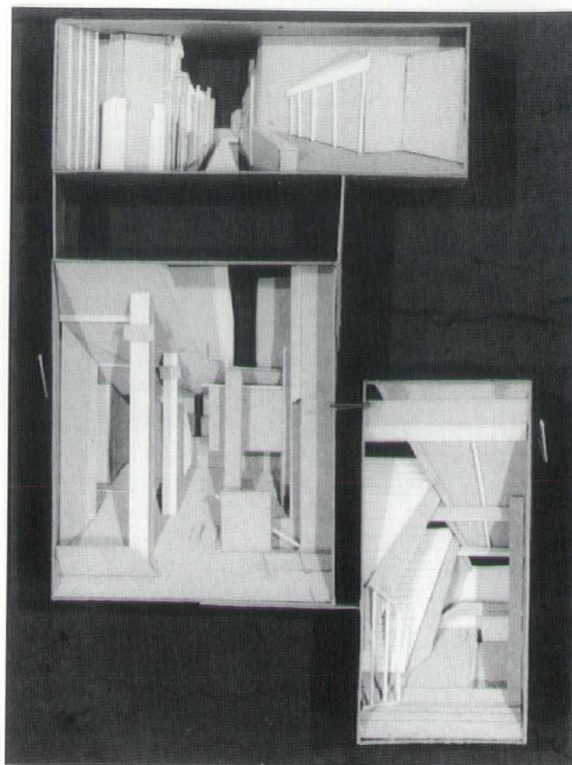
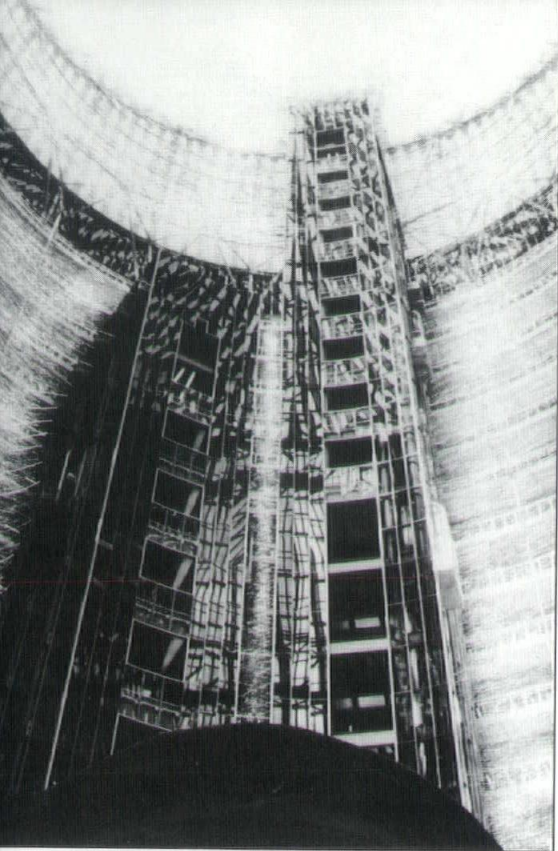
In each instance, as if often is among architects, the talk was of people, economic development, a nation’s needs, design, architecture and urbanism, and education and practice. And computers and internet, and the ease of communication and transmission of architectural work. And international reciprocity, access to practice, and education accreditation.

The opportunity to observe the range of educational programs, to meet with students, faculty and practitioners in so many arenas, to help advance the quality of architectural education and to share perspectives on accreditation has been exhilarating. It has also raised some doubts, not about accreditation or the international exchange of ideas about education or about international practice, but about the co-option of architectural education — entry into the discipline of architecture — solely to the service of entry into the profession in a narrow regulatory sense. This may seem like a fine point,

but let me try to explain.

NAAB’s primary mission is the accreditation of professional degree programs in architecture in the US. Implicit in this are two premises. The first is that accreditation is concerned with the quality of architectural education. The second is that ‘professional degree programs’ are preparatory for, and a link in the path to practice, a path which all includes practicum internship, examination and increasingly, continuing education. Both premises are considered in NAAB’s work.

NAAB is a partnership among educators, practitioners, architectural registration regulators and students. It develops minimum performance standards for schools and degree programs regarding operations, curricular content and student accomplishment. The standards are “performance” rather than “prescription,” to encourage the maximum diversity of structure and approach to education. Accommodating and nurturing diverse approaches requires diligent effort. Every three to five years a school is visited by an accreditation team which reviews its architecture program in terms of those standards. Based upon the school’s written



(Far left) Rob Wheat, 4th year
Chicago study

(Left) Robert Mackenzie
(Glasgow exchange student),
4th year Chicago study

documents and the visitation report, the NAAB establishes a term of accreditation.

Architecture and construction, as with most other economic sectors, is global in scope. International partnerships and commissions are increasingly common. Qualification for international practice, and cognition of professional and educational standards among countries has been regularly surfacing as an important issue. Architectural education is the basic foundation for becoming an architect. NAAB has been incorporated for fifty-five years, and has been relatively successful in promulgating improved standards while accommodating diverse education programs. It has managed to maintain some reasonable balance between consideration of liberal education and professional foundations. Simply put, other nations and groups of nations are interested in NAAB as a model for its standards, ability to accommodate diversity and processes of accreditation.

Architectural education in the US weaves together several threads: a liberal education; an introduction to the discipline of architecture, its histories, theories, values and cultural grounding; processes and methods of architectural speculation and invention; technologies and techniques; modes of representation; computers; practice and the recognition of societal obligation; criticism.

Architectural practice, that is, the designing and building of the world we inherit, inhabit and shape, similarly has multiple threads woven together. Current social, political and economic phenomena are extended through the designed and built environment because architecture is enmeshed in contemporary culture, it is an artifact of culture. While their strengths, interests and contributions may vary, individuals, firms, institutes, governments, and corporate and vernacular practitioners share this general conception of practice.

If architectural education centers of primary productions to the discipline and critical perspective, practice centers on gritty social

construction of the environment. Sometimes that social construction involves critical perspective. Always it involves conjecture, speculation and invention. This is the terrain education and practice share. This is the terrain of architecture.

Incipient in the international conferences and university visits are the polarities of the excitement of discovering common architectural ground and the risk of the degeneration of diverse vitality in architecture. The drive to learn from one another, to share information, techniques and technologies, and to practice together is the promise. An international leveling, rather than leavening, of both education and practice is the risk.

Discourse and practice require reasonable parity and respect in order to take place. Partnership requires parity at some fundamental level, otherwise there is a subsuming, a subjugation, not a partnership. Parity is not coincident with "sameness." Parity begins with understanding and accommodating diverse premises. However, access to practice internationally and international mobility requires, according to common wisdom, mutually understood, promulgated and enforced uniform standards. This differs substantially from working toward accommodation with limited restructuring.

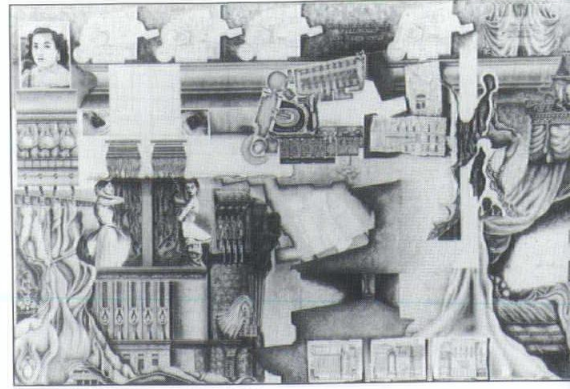
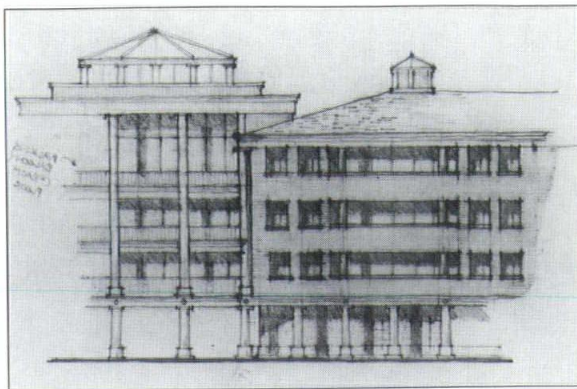
Is "uniformity" necessarily a "problem"? To the degree that uniform performance standards elevate architectural education and professional preparation to acceptable minima while accommodating diverse basic approaches, I would say no. To the degree that performance standards become prescriptive, to the degree that accreditation in education is increasingly co-opted as an obligatory legal step to practice rather than an enhancement to education, to the degree that the process leads to increasing international bureaucratization of the profession, to the degree that models of professionalism that can be seen to be outmoded are codified, which once codified and bureaucratized are nearly irreversible, I would say yes. There are signs that this latter process is underway.

To reclaim much territory lost to engineering, sociology, history and cultural criticism, faith must be restored that we can serve as the custodians of the public interest and that architecture is an academic discipline proper with a history and potential future at least as glorious as that of medicine and law.

—Lars Lerup, Dean,
School of Architecture,
Rice University

(Right) Jim Dunwell, 5th year option studio, senior community in Massachusetts

(Far right) Mitchell Squire, 5th year option studio, Paris Prize competition



Both the practicing profession and the academy have an obligation for leadership and influence on issues that impact the natural environment and that produce the made environment. Both have responsibilities to grow the body of knowledge. Both have a sacred charge to mentor and nurture the next generation of architects. Both are failing.

—R. Nicholas Loope, AIA, CEO and Managing Principal, Taliesin Architects

The PRC has completed a five year trial program in bringing the architectural education programs in their top eight universities up to international standards. The model they used is the five year US model. There have also been substantial investments in facilities, computer systems and faculty. The next major investments will be in library and research materials.

In addition to the education reforms and development of an accreditation system, the PRC has established a three-year internship requirement for professional preparation, and will be administering their first national architectural licensing examination this autumn. The persons meeting these standards will qualify as PRC "Architect First Class." They are expected to qualify as peers with other leading international practitioners and respected and admitted to international practice as such. The PRC National Board of Architectural Accreditation and the PRC National Administration Board for Architectural Registration have been established to work with their international counterparts.

The EU has been addressing international trade and mobility among its member nations for some time now. Architectural education and practice, and architects, through the Advisory Council of Architects (AC) to the EU, are a component of this larger effort. The AC has proposed a thirteen point standard of content to be met through architectural education, and has proposed a five year university degree, a two-year internship and some type of examination (yet to be determined) as the basis for the right to use the title architect and to practice architecture internationally within the EU. Already, a number of programs have been closed, and in Italy there has been a systematic reduction in the number of student acceptances to architecture programs in order to focus resources to conform to the newly defined standards.

International commerce in architecture is a permanently established phenomenon from which there will be no returning, nor should there be. The discourse, exchange and practice is vital and rich. International architectural competitions, practice partnerships and commissions are alive and well on all continents (yes, including Antarctica). Undoubtedly, many of the initiatives outlined above will improve the minimum level of educational performance and professional preparation, and will enhance the ease of access to international practice.

Why the concern? I would like to think the

programs mentioned above — professional education programs, accreditation, internship and licensing examination — are primarily motivated by the desire for improved quality and practice, and improve service to society. At one point in time, I believe they all were. I fear the current flurry of activity is motivated, equally if not primarily, by economics and commerce — access to markets. When considered in such terms, architecture is defined as a commodity service, externally from its conception as a discipline. It becomes defined in measurable legal terms that meet the tests of international adjudication. While architectural practice itself and international practice structures have perhaps never been more diverse, out of expediency we appear to be moving toward the codification of a single model of the profession, architect and professionalism.

I am concerned because the conception of accreditation as expressed in NAAB's bylaws that a well integrated and coordinated program of architectural education be developed which will be national in scope and afford opportunity for architectural schools with widely varying resources and operating conditions to find places appropriate to their special objectives" is at risk of being co-opted as is architectural education, to primarily meet the legal needs of entry to practice. University-based programs of architectural education in the US appear to be ossifying under their own weight of tenure. Independent architectural institutes are increasing, being formed because, for a growing number of people, the university system and the accredited professional degree are becoming reductive and no longer serve liberal conceptions of education and practice. I am concerned because I do not see active leadership from within education to counter any of this, or to fundamentally reassess the nineteenth century educational structure which we still inhabit and to work on the re-invention of architectural education as we face the twenty-first century.

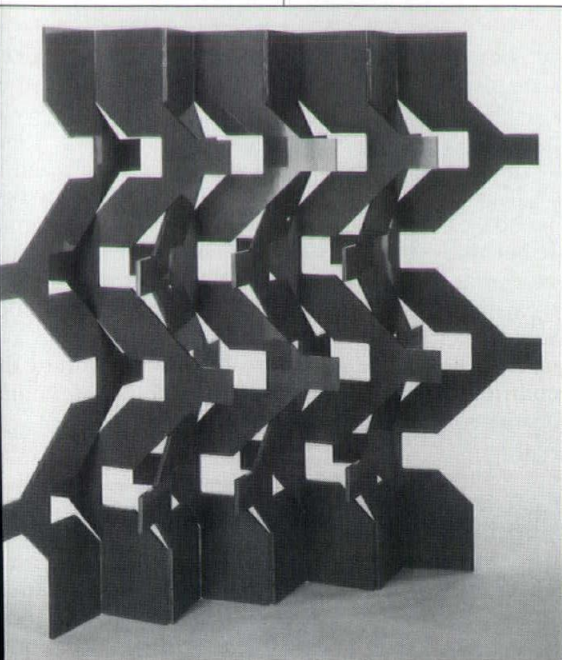
There are more threads to be pursued here than are appropriate for a conclusion. More succinctly put, the drive to international professionalization of architecture is concomitantly leading to a reduction and narrowing of accreditation and architectural education. While strongly fostering international discourse and exchange in education and international practice, the architectural profession ought to be working toward more inclusive rather than exclusive models for each.

DesignDigest

Quando Screen
Palazzetti
212.832.1199

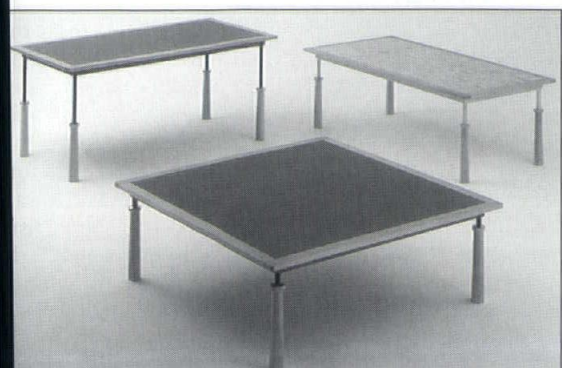
The Quando Screen is part of a collection of furniture characterized by a precise functionality, not without a sense of humor, fun and joy of living. Designer Silvio Russo pushes his creativity beyond the direct combination of

design, material and technology. The Quando Screen is available in glossy white, black and tropic jade.



Up & Down
Italiana Luce
203.378.4000

The height of these tables can be adjusted by rotating the threaded ring on the upper part of the legs. All versions have galvanized steel frames. Tops are available in cherry wood, glass with larch wood edges, brick red or dark gray laminate with larch wood edges, and plywood with larch wood edges. The height of the table top may be adjusted between 49 centimeters and 73 centimeters.

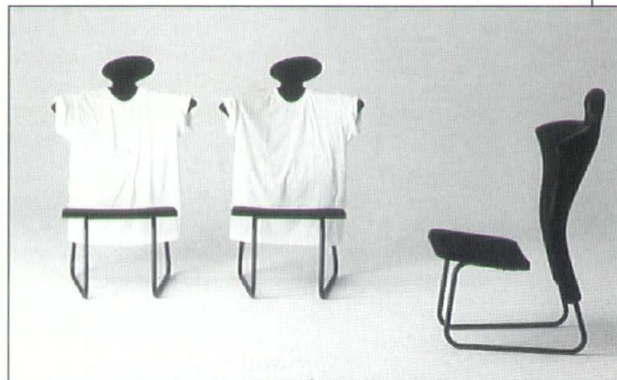


Drawer Tower
Schacht Spindle Company
303.442.3212

Drawer Towers ranging in height from five to six feet are custom built to your specifications. The fully finished backs allow these commanding towers to stand anywhere in your library, den, bedroom or living room. Use your tower to hold books, wine or electronic entertainment. Drawers come in three depths, perfect for holding everything from CDs to socks, linens to lingerie, bracelets to butterflies. Drawer Towers are available in Shaker or Scandinavian styles.

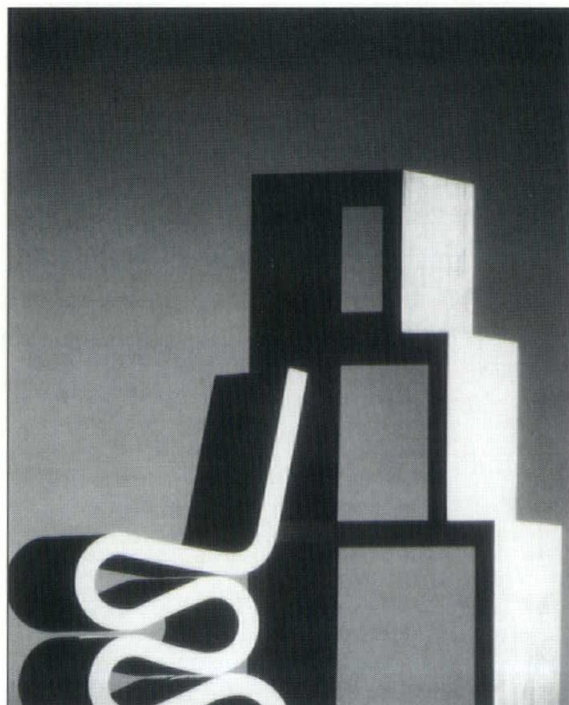
T-shirt
Italiana Luce
203.378.4000

A t-shirt in a color and pattern of your choice becomes the cover of this "casual" chair. With a black tubular steel frame, the seat and backrest are a fire resistant freon-free polyurethane. Covered in black stretch fabric. Dressed as you like.



Whiggle Side Chair/Low Table Set
Hart Associates
515.224.6590

Designed by Frank Gehry, the Wiggle Side Chair and the Low Table Set are made of bonded layers of corrugated cardboard. Edges on both the chair and table are finished in hardboard. Three tables sizes stack under each other for compact storage.



Journal

ISU Professors Place First in Atlanta Competition

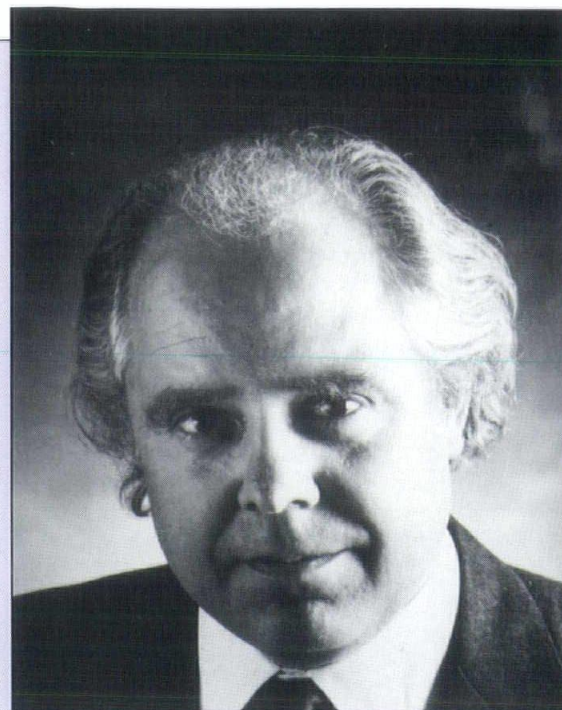
Iowa State University Department of Architecture professors William Conway and Marcy Schulte have been awarded first prize in a national competition entitled "Public Space in the New American City/Atlanta 1996." Sponsored by the Corporation for Olympic Development in Atlanta and the Architecture Society of Atlanta, the focus of the competition was to develop the downtown Olympic Ring, while addressing the role of public space in a city lacking a strong history of it. Competition entrants were invited to

select one or all four of the chosen installation sites.

The design team's entry, entitled "De/Cod-Re/Code Atlanta," was proposed for the streetscape site. It was one of four winners selected from over 680 entries from 48 states and 24 foreign countries, making this competition the most highly entered since the Astronaut Memorial competition.

Jurors included architects Michael Sorkin and Mack Skogin, writer and critic Lucy Lippard, landscape architect Elizabeth Meyer, sculptor Houston Conwill, and cultural critic Andrew Ross. Of Conway and Schulte's entry, the jury commented, "The entry addressed the notion of what is public by questioning the coding system which defines public from private ... succinct formulation of the relationship between public expression and public space. The project locates the nature of public space in its use rather than its form, and proposes a strategy to promote diversity of activity in what promises to become one of the liveliest zones in Atlanta. It challenges the typical building code that limits discussions of public space to quantities of stuff—signs, trees, banners, balloons, etc. This code establishes free zones with manners ... a temporal frame for free expression and debate."

Construction of the winning projects is to begin in January 1995.



ISU Names Dean for College of Design

Mark Engelbrecht, Professor of Architecture at Iowa State University and principal of the firm Engelbrecht and Griffin, has been named Dean of the College of Design at Iowa State University.

A native of Nevada, Iowa, Engelbrecht received his bachelor of architecture degree from ISU in 1963, and a master of architecture from Columbia University in 1964. Engelbrecht began his professional association with ISU in 1969, when he served as a visiting lecturer in the Department of Architecture. He has held several temporary and adjunct positions at the university, and in 1984, joined the faculty full time as a Professor of Architecture.

Says Provost John Kosak, "Perhaps more than any other candidate, external or internal, Mark's vision for the college generated a real enthusiasm among faculty, staff and students. He emphasized that by bringing together in a synergistic way the perspectives of architecture, landscape architecture, planning and the studio arts, Iowa State could provide students a unique educational experience at Iowa State."

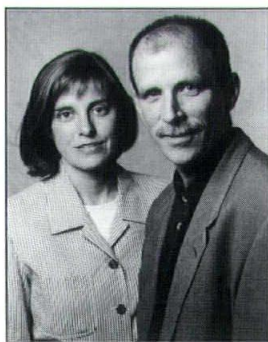
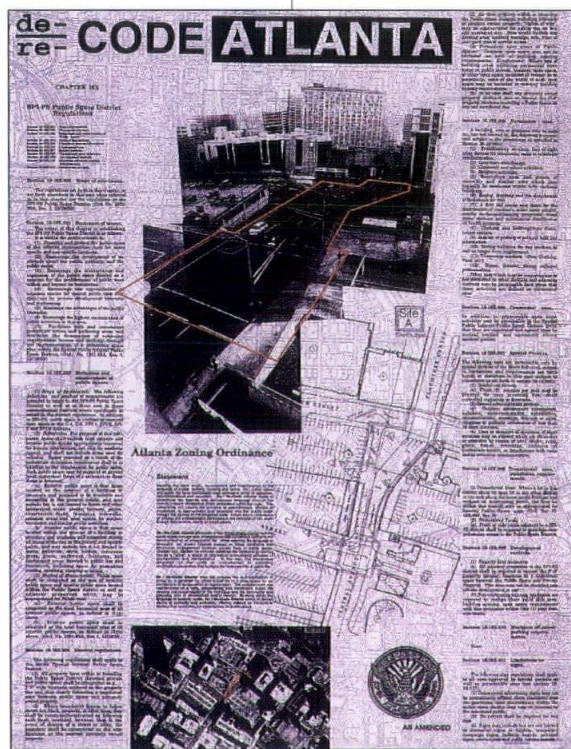
The appointment of Engelbrecht closes a 21-month process that included an internal search as well as two national searches. Engelbrecht says, "I would like to express my gratitude to all of those colleagues within the profession who supported my candidacy and pledged a tenure that would be very determined to strengthen the close, traditional ties that connect the practice with the college."

Engelbrecht began his new post August 1.

Correction

In the Winter Issue, No. 93:208, of *Iowa Architect* magazine, Wendy Ornelas, AIA, Condia Ornelas Associates, was incorrectly identified as being from Kansas City. Condia Ornelas Associates are located in Manhattan, Kansas. *Iowa Architect* apologizes for the error and any inconvenience it may have caused.

GREG LEHMAN



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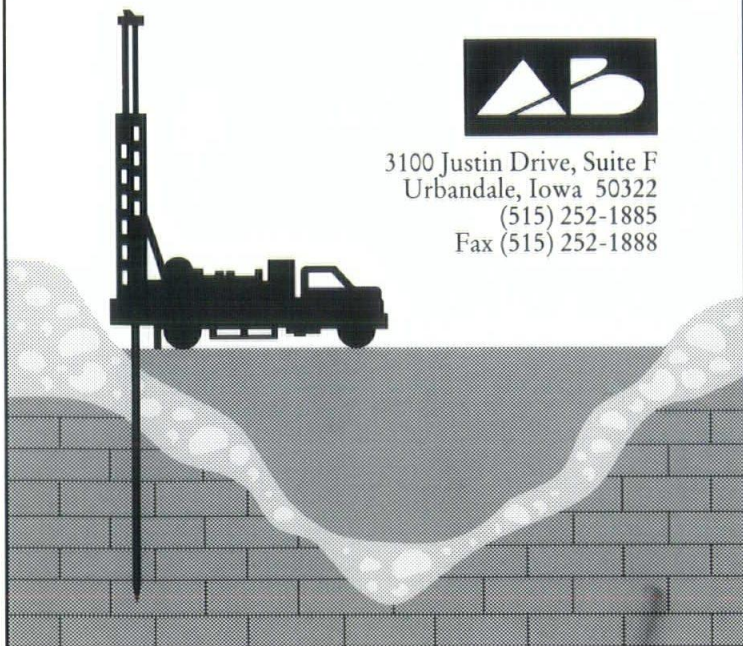
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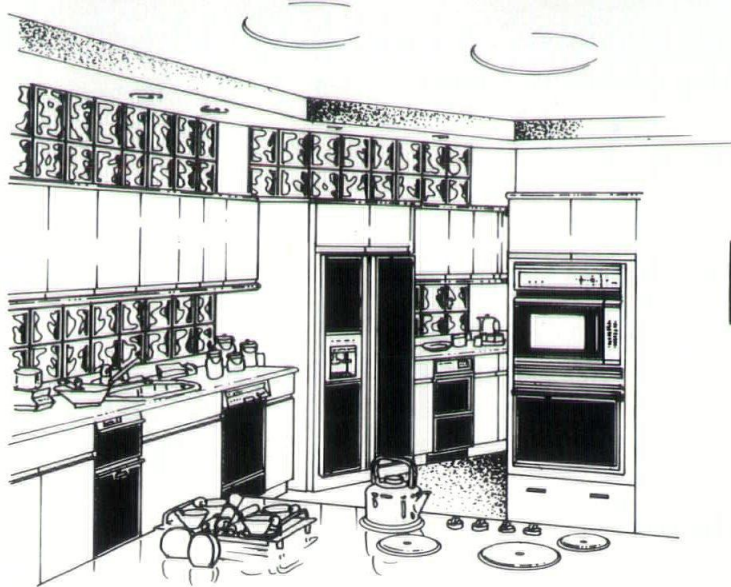
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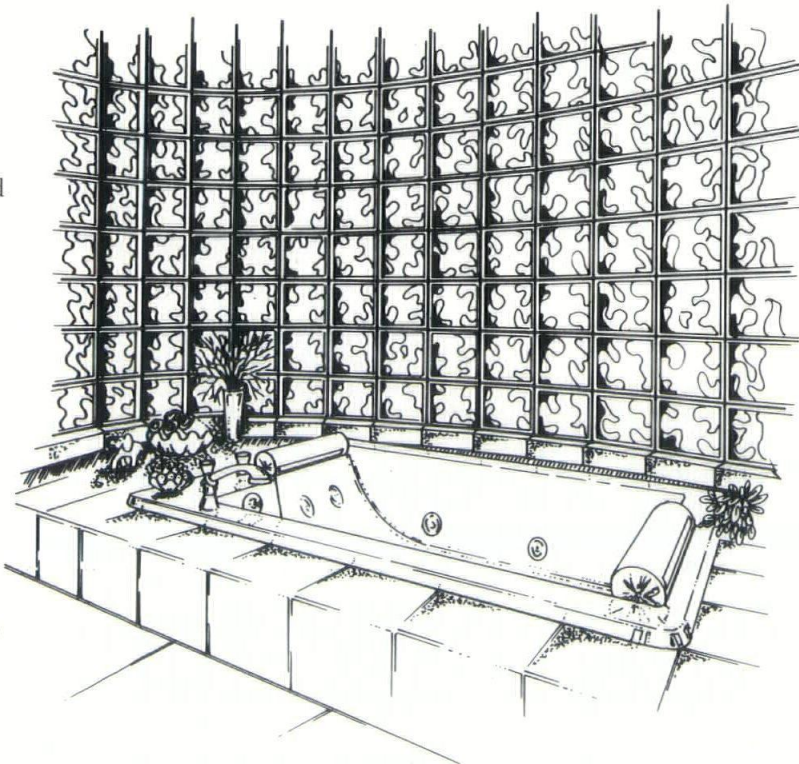
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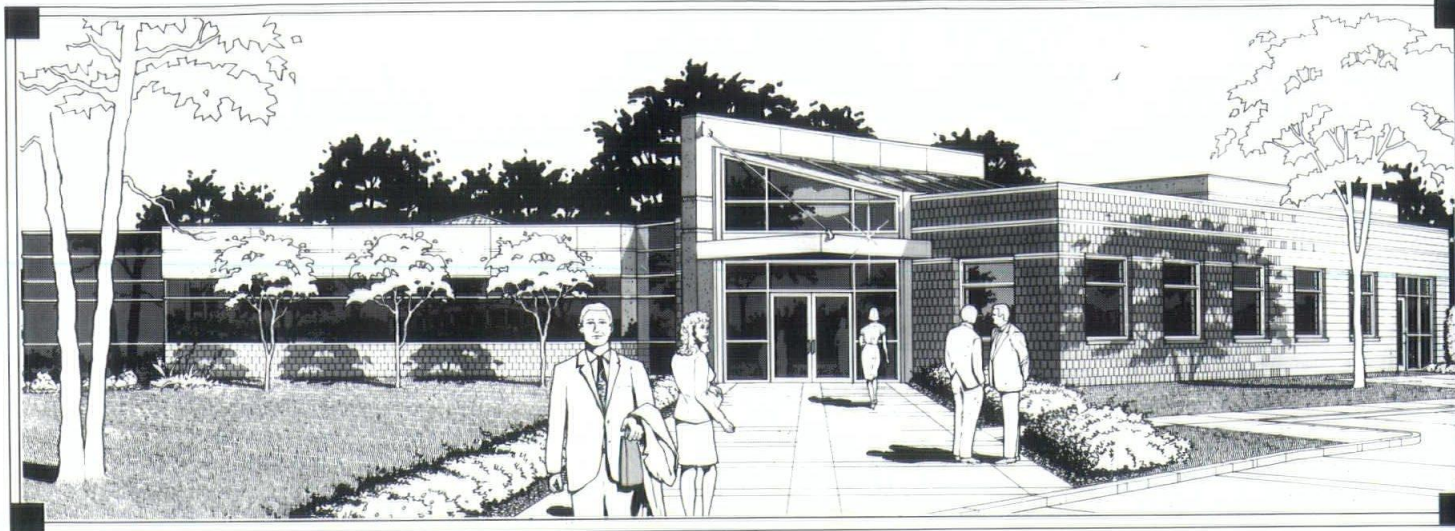
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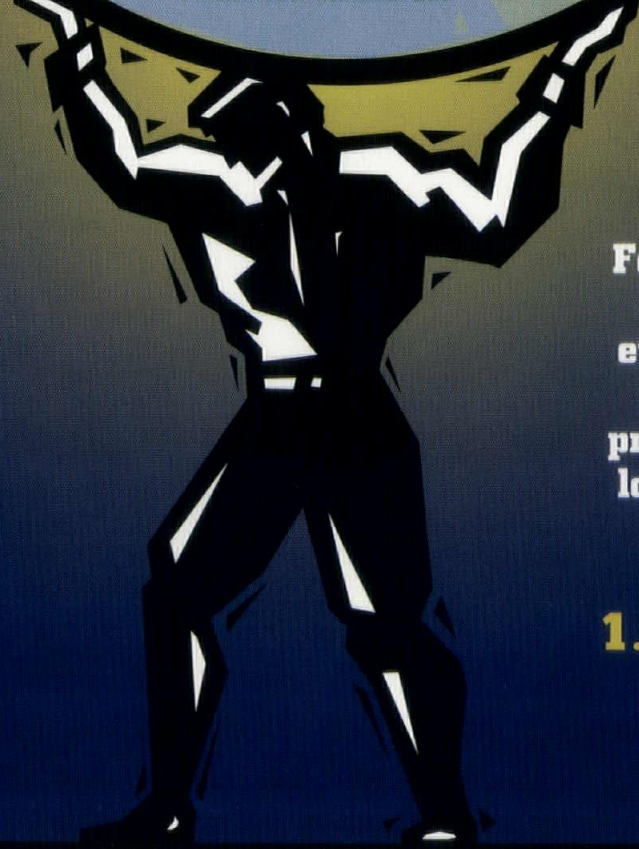
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