

Issue-Oriented Design Studios: *Nuestra Clinica para la Salud* – 13 Possibilities

GABRIELLA GUTIERREZ
University of Houston

INTRODUCTION

Since the middle of the 19th century, significant advances have been made in the development of health care and the environment in which it is provided. Many professionals who specialize in the design of health care facilities agree that in addition to the eras of advancement in medical and building technology, an era of *humanitarian* sensibilities is re-emerging and affecting the attitudes of architects, educators, and health care providers concerned with the quality of the environments in which they practice. Clearly the job of developing successful models for future humane therapeutic environments that serve important medical and community purposes will fall to sensitive architects with specialized training and experience, and design instructors willing to introduce into the design studio building types typically ignored because of their inherent programmatic complexities and a prevailing attitude held by many architects that the design of health care facilities simply does not yield good architecture.

In Houston, the fourth largest city in the United States, there are large geographically and culturally isolated, minority communities with many members who are uninsured and earning very low incomes. The children within these communities are the ones most seriously affected by lack of

access to appropriate and adequate health care services. *Nuestra Clinica Para La Salud* - Our Clinic for Health - is an excellent example of an alternative model for providing primary and preventive health care services to school children (and their families) in the East End, an inner city community located adjacent to Houston's downtown central business district. The underlying challenge for the Healthcare Environments Studio during the Fall 1993 semester was to bring physical form to *Nuestra Clinica*. The project provided an opportunity for 5th year undergraduate and 3rd year graduate architecture students to test their knowledge and share discoveries with a "client" group with real needs and expectations, as well as establish and strengthen relations between the university and the surrounding communities.

THE HEALTHCARE ENVIRONMENTS STUDIO: BACKGROUND

The Healthcare Environments Studio, which I developed and taught during the 1992 and 1993 fall semesters was one of eight design studio options.¹ The main goal of the studio was to introduce students to research and complex programmatic issues through the investigation of health care environments.

A community clinic and a basic research facility were the first projects undertaken during the fall 1992 semester. The programs were treated as prototypical study models investigating a number of important issues including responsive planning and programming for community based facilities, as well as addressing the expectations and needs of special user groups.² The sites selected embraced both residential and mixed-use districts.³ Students were asked to consider the extent to which architectural elements can combine to afford a stimulating, imaginative, yet non-threatening work environment. They explored formal possibilities within the constraints of an efficiently functioning facility, and the impact of a community clinic and a research facility on the surrounding community addressing contextual, logistical, and formal issues. The work produced by the students sparked further investigation into an area of architecture that has great potential for generating new knowledge and mean-

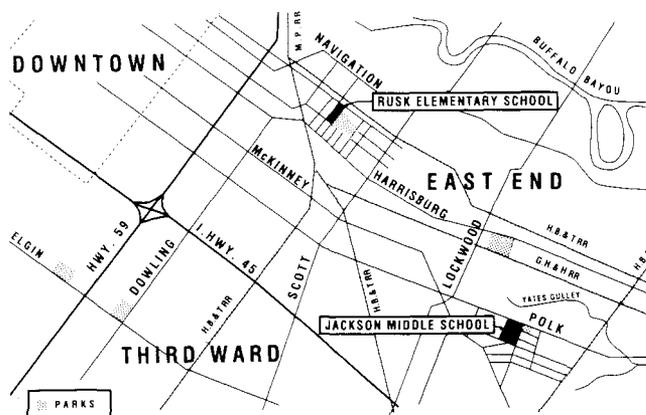


Figure 1. Location Map

ingful research projects. Additionally, students learned that through their active participation in the public arena, their work takes on new meaning and value, and that discussion and interaction with people outside of their area of study enhances the public discourse.

SCHOOL-BASED HEALTH CARE: BACKGROUND

Health Educator Dean F. Miller, who has written extensively on issues relating to community and school health programs, argues that "school-based health clinics are needed and can be justified, especially in rural and inner-city communities." Miller believes that given children's need for health care (preventive care in particular) and the problems of access to such health care, make a convincing case for "bringing health services to where the children are — in the schools."⁴ Providing health care in the schools is not a new idea. There are numerous precedents in the history of education in America.⁵

Many successful models of school-based health centers are cited in a report published by the School-Based Adolescent Health Care Program in Washington, DC. *The Answer Is At School: Bringing Health Care to Our Students*, was compiled in collaboration with grantees of the Robert Wood Johnson Foundation.⁶ It contains significant information on school-based health care programs and the health status of adolescents in the United States, as well as providing answers to a variety of important questions. It is important to note that most of the scholarship on school-based health centers contains very little information on issues related to developing the physical environment. More emphasis is placed on functional and equipment requirements and less on architectural issues.

An important issue and highly controversial area addressed by Miller in his book, and discussed with Dr. Carlos Vallbona, Director of Community Medicine at Baylor College of Medicine, is reproductive health services. Miller cites the realities: that a high percentage of teenagers in America are sexually active, and more than a million of them become pregnant every year.⁷ A result that Miller attributes to limited knowledge of the basic facts of human reproduction and of birth control.⁸ Dr. Vallbona spoke about what he refers to as a counter movement to school-based clinics that is fueled by the misconception that their (the clinics') health care programs are there only to "teach students about non-traditional sex and to distribute condoms."⁹ Dr. Vallbona believes this to be the prevailing attitude of the majority of people, and that it is an unfortunate one. He sees informing the public about preventive and primary health care as an important task of the professionals involved in the movement to bring these facilities into the school system.

NUESTRA CLINICA PARA LA SALUD: THE HEALTH CARE PROGRAM

The Texas Department of Health, as part of a national initiatives program, issued a request for proposals for the

development of community oriented health care programs that would effectively address issues of affordability, availability, and accessibility. In early 1993, the Harris County Hospital District in collaboration with Baylor College of Medicine and the Houston Independent School District responded with a proposal to establish *Nuestra Clinica Para La Salud*—Our Clinic for Health—at Jackson Middle School located in a predominantly Hispanic inner-city community in Houston.¹⁰

The program for *Nuestra Clinica* is built on a foundation of education, training, and service delivery that is school based and community focused, with the prevention of illness and the promotion of wellness as its primary concerns. It is a collaboration among three major organizations and numerous community-based service agencies." The main goal of *Nuestra Clinica* is improving the health of Jackson Middle School's students, their families, and the surrounding community.

NUESTRA CLINICA: STUDIO STRUCTURE

With economic factors limiting access to health care for many Americans, particularly those who are disadvantaged

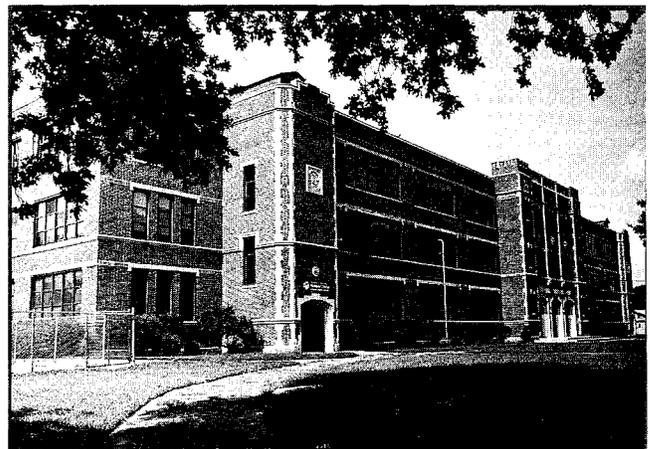


Figure 2. Jackson Middle School in Houston's East End.



Figure 3. Jackson Middle School students.

and minority, and public school districts across the country facing reductions in their operating budgets. Given these conditions, hard questions had to be asked: How effective can the role of the architect be in developing and designing school-based health care centers? Is it possible for centers that contain only the minimum essentials, to feel like a "health home" to its students? What should they look like, and how should they be designed to function efficiently while at the same time effect a positive influence on the physical and psychological well-being of its users? Can architecture instill in its users a sense of comfort and wellness? Should primary/preventive health care clinics be in the schools, and what relationship should they have to the school and to the related community? Will they have an impact on the health status of America's at-risk youth? These and many other important questions functioned as points of departure for the architecture students who selected *Nuestra Clinica* at Jackson Middle School as their design studio option.

The underlying challenge for the Healthcare Environments Studio was to bring physical form to *Nuestra Clinica*. In meeting this challenge the studio, working as a team with the assistance of visiting professionals and client/users, began their investigation of architectural issues and their relationship to the health care environment. The studio work was structured in three parts: first, research, analysis, and programming for understanding the site, context, functional relationships, and client/user needs, second, schematic design development responding to results from part one, and thud, internal and public reviews and exhibitions for feedback from academia, the profession, and the users.

Part One: From an all day session, the students, working with an architect who specializes in the programming and planning of health care facilities, developed a set of goals for their model of *Nuestra Clinica*.¹² The basis of these goals was derived from lectures, research, analysis, and interviews with the users (i.e., the principal, school nurse, facilities' director, director of community medicine, and JMS students). The goals assisted the students in establishing current and future spatial and functional requirements for their projects. Research and analysis of the site and similar program and building types was also conducted. Visits were

made to clinics and research facilities in the Houston area to discuss objectives with professionals from each institution, and with specialists in the development of health care environments. The work resulted in a 50 page program draft which contained project goals and objectives, site analysis, and building analysis of Jackson Middle School and related clinical facilities, program analysis, space and equipment requirements, statistical information (demographical), and a variety of maps (i.e., school districts, location, figure-ground studies, etc.).

Part Two: Applying information from Part One, and keeping in mind the questions posed at the beginning, the studio began its design investigations. The importance of integrating formal issues with complex cultural, social-economic, and programmatic issues was emphasized throughout the process. Encouraging the students to consider such complexities design opportunities, and to respond with imaginative but responsible design solutions for the recipient community, was one of the studio's main goals as well as strengthening and illuminating the connections between theory and practice, and research and design. Repeated visits to the site and interaction with the users, which became an ongoing part of the process, was appreciated by most of the students and made for a more meaningful design studio experience. Documentation and presentation of individual work included research and analysis of context and program issues, sketches and final drawings, study models, a project narrative, and analytical diagrams of their proposed solutions. Although presentation format was left to the discretion of each student, a list of drawings and a set scale were required in order to make it easier for users as well as students and visiting critics to compare the different proposals.

Part Three: At the end of the semester a final presentation of their work, juried by visiting architects who specialize in health care facilities' design and representatives from the institutions involved was conducted at our college of architecture. Following the jury, the work was exhibited for four days in the gallery at Jackson Middle School as a means of sharing with JMS students, faculty, administration, and staff as well as community residents the studio's proposals for *Nuestra Clinica*. To encourage attendance by a larger audience, a bilingual announcement of the exhibition was

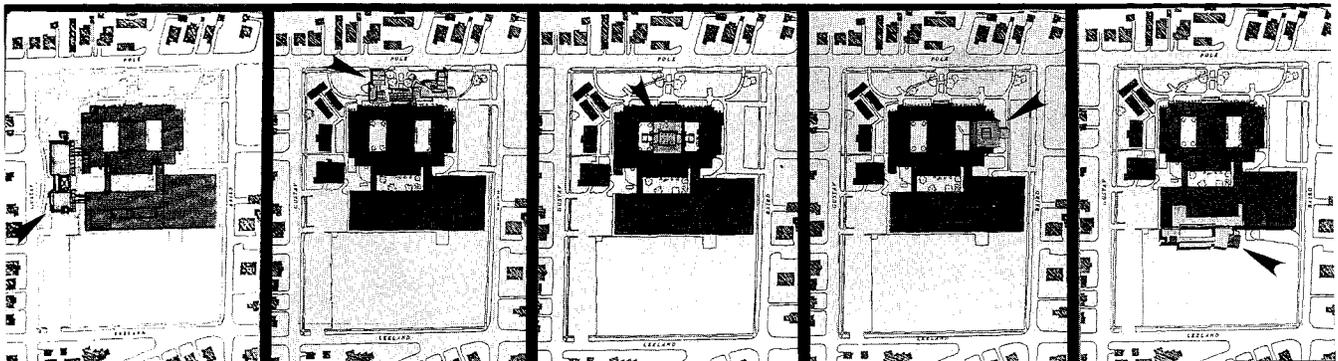


Figure 4. Location diagrams of the clinic in relation to the school.

developed and posted in various locations in the school as well as distributed to JMS students, faculty, staff and the community at large. Public exhibition provided exchange and feedback not typically received in the traditional design jury.

NUESTRA CLINICA: 13 POSSIBILITIES

After the preliminary work was completed, the students selected locations for their respective projects. Dr. Vallbona expressed his belief that proximity to the gymnasium as well as the cafeteria is important because of the potential of relating physical activity and eating to health and nutrition. School nurse, Cynthia Wiist, felt that the clinic should be close to her office. Locating the clinic on the ground floor for easy access from the neighborhood and from within the school was important to the clinical staff. The range of the students' responses to these and other important issues affecting location possibilities are represented in Figure 4. below.

From left to right, Elizabeth Miller responded to existing circulation patterns by enhancing a secondary entrance (which is actually the primary entrance) to the school by providing a more inviting entrance and gathering place for the students. (The main or formal entrance to JMS is, unfortunately, not used on a daily basis.) (Four students chose this location.) Mark Atkins located the clinic on the

front lawn of the school making it a major component of the campus, and to reveal a fresh, new posture that he believes the Hispanic community could easily identify with. (One student chose this location.) Greg Lege transformed an existing, but unused, auditorium into the clinic. Its central location signifies permanence and metaphorically provides the school (and community) with a new heart. (One student chose this location.) Maya Basyroel located the clinic next to the gym and cafeteria, a response to Dr. Vallbona's suggestion. She transformed the existing gym wall into a graphic wall, which would be used to communicate, using a variety of graphic media, ideas of wellness and healthiness to students and community residents as it guided them along the path toward the clinic's entrance. (Two students chose this location.) Troy Black responded to several existing conditions: Cullinan Park across the street, an existing parking lot, the school building's east courtyard, and the absence of a second and third story on the southeast corner of the school. He saw the architectural siting of the clinic as a logical completion of the building. (Five students chose this location.)

The following two projects were selected for discussion because they represent opposite architectural and philosophical positions. The project in Figure 6. was considered by nearly everyone, including JMS students, as radical both in its form and relationship to the school as well as to the **community**. Its form resulted from a series of shifts and

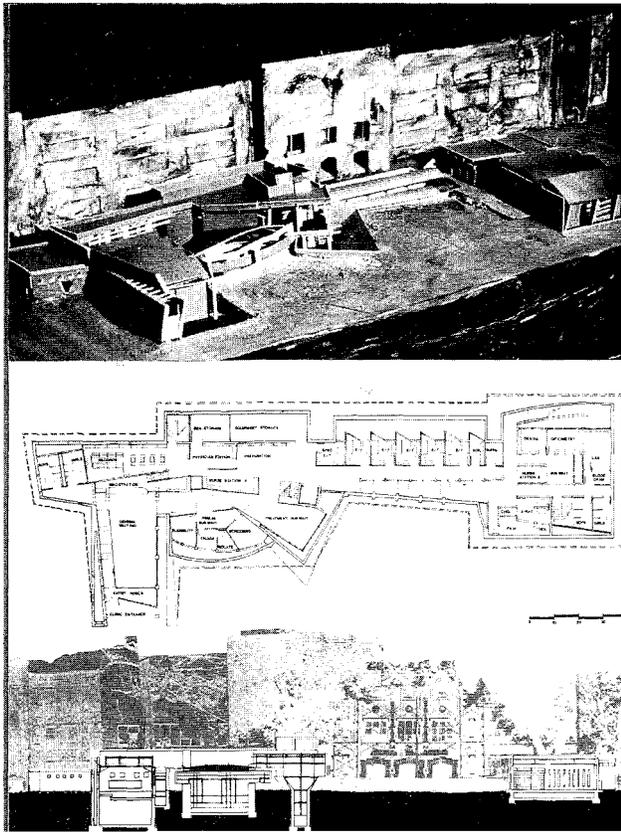


Figure 5. Model and plan by Mark Atkins.

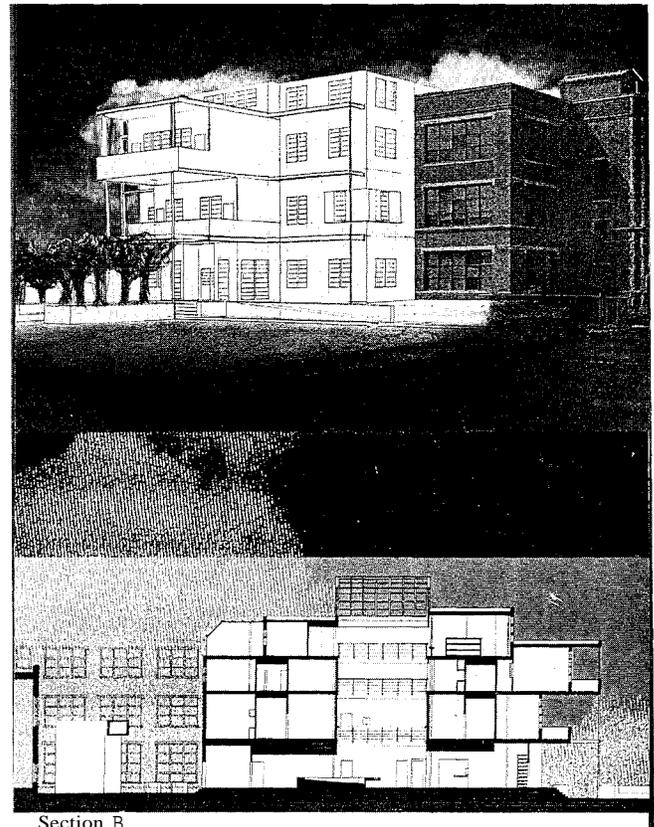


Figure 6. Photomontage and section by Troy Black.

maneuvers necessary to adapt the clinic to the existing natural landscape and to provide accessibility to the clinic's multiple functions by dispersing the entrances to various aspects of the site. In so doing the critical issue of accessibility by all members of the community is addressed. This project was selected by some JMS students as the closest to representing their vision of *Nuestra Clinica*. The project in Figure 7. was the most compact, and considered by jurors and users to be the most efficient of the proposals. It is formally organized around a central sky-lit atrium, which spacially connects the clinic to the school and its' existing east courtyard, and visually to Cullinan Park across the street - the park, clinic, and school, becoming a metaphor for community, health, and education. Gardens and fountains were used to convey a "sense of well-being" to the users. The project was also sensitive to the architectural style of the existing school.

Although the issues were the same, each student in the studio developed a distinct position or belief that was clearly reflected in his or her design thinking and design solutions. The option for site selection was one of the most important factors contributing to the success of the studio, as was the involvement of students with outside professionals and client/users, and the emphasis on research and analysis. These factors added significantly to the educational value of the projects undertaken, and to the design studio experience. Each student successfully addressed the complex issues inherent in the program and the site as well as the equally complex but less tangible issue of developing an architecture that can instill in its users a "sense of well-being." The results clearly demonstrated that issue-oriented design studios have the potential to provide students of architecture a more complete understanding of the influence of social and economic realities on the built environment. These studios encourage responsive holistic design, and strengthen and illuminate the connections between theory and practice, and research and design.

CONCLUSION

The adaptability of the design studio format to a variety of pedagogical strategies has contributed significantly to its success as an effective model for teaching design principles. Although the virtues of the studio model are widely known and accepted, much of the scholarship on architectural education holds that the model has yet to fulfill its potential.¹³ Studio models like the Healthcare Environments Studio, that are dedicated to enhancing the connection between teaching and research are critical to the evolution of architectural education. In a design studio milieu that typically provides an environment rarely constrained by the realities of economic, social, and cultural concerns, this type of model is especially important. Encouraging students to consider such constraints design opportunities, and to respond with imaginative but responsible design solutions for the recipient community, was one of the studio's main goals. By provid-

ing an opportunity for students and faculty to focus on a range of complex issues as opposed to the purely formal propositions more typically posed in the traditional design studio offers greater possibilities for advancing the discourse of architectural design education.

ACKNOWLEDGMENTS

For providing the opportunity for me to develop the Healthcare Environments Studio, enabling me to connect my medical background with my architectural experience, I thank Peter Wood. I also thank my colleagues, Deborah Morris and Rafael Longoria, for their thoughtful and critical editorial assistance, and Fiona McGettigan for her graphic design contributions to the studio.

NOTES AND REFERENCES

During these semesters the following design studio options were offered: an experimental architecture studio which focuses on extreme environments, and social and technological trends; a studio that focuses on the "interface" between architecture and urbanism with emphasis on characteristics specific to the "Post Expressway City," (i.e., Houston); a studio that deals with campus planning issues using the University of Houston campus as a laboratory; a "Freedom Studio" which permits students to pursue their design interests and assume total responsibility for every aspect of their projects; a studio that centers on historic preservation and adaptive use as a means to effect positive change within urban and rural settings; a studio focusing on urban design and planning issues; the "Texas Studio" which deals with regional and site specific issues and is dedicated to the "architectural commitment to place,"; and the Healthcare Environments Studio.

² Twelve students were enrolled in the first Healthcare Environments Studio. The semester was divided in half for each project (the clinic and the basic research facility). An entire semester could easily have been devoted to each project, however, it was important that the students deal with two program and building types that represent opposite ends of the health care spectrum, i.e., provision of primary health care (the real) and basic or applied research, (the abstract). The work from the entire studio was documented in a large format portfolio and publicly exhibited.

³ The community clinic was sited in the Third Ward, a predominantly African American neighborhood located near downtown and in need of revitalization. The research facility was sited in the Binz neighborhood, a mixed-use area that contains the museum district and is located near the Texas Medical Center and Hermann Park.

⁴ Dean F. Miller, *The Case for School-Based Health Clinics*, Phi Delta Kappa Educational Foundation, Bloomington, Indiana, 1990, p. 9.

⁵ *Ibid.*, pp. 13-15.

⁶ *The Answer Is At School: Bringing Health Care to Our Students*, is a report compiled by The School-Based Adolescent Health Care Program in Washington, DC. The information contained in the report is based primarily on the experience of the grantees in the Robert Wood Johnson Foundation's School-Based Adolescent Health Care Program, (not dated, probably 1992).

⁷ Dean F. Miller, *The Case for School-Based Health Clinics*, Phi Delta Kappa Educational Foundation, Bloomington, Indiana, 1990, p. 19.

⁸ *Ibid.*, p. 19.

⁹ From an interview with Dr. Carlos Vallbona, Houston, August 1995.

- ¹⁰ *A Proposal to the Texas Department of Health to Establish Nuestra Clinica Para La Salud at Houston ISD's Jackson Middle School* contains a significant amount of information on the related community. Its main components are: goals and objectives, needs assessment, organizational capacity and operating strategies, proposed services, and program budget. The proposal was initiated by Dr. Carlos Vallbona, Director of Community Medicine at Baylor College of Medicine. The project was awarded a grant for a two year period that began in August 1993.
- ¹¹ Physicians including the clinic's director are provided by Baylor College of Medicine, clinical staff by Harris County Hospital District, and the facilities, and school nurse by Houston Independent School District. Community organizations include: Communities in Schools, Beating the Odds, the Association for the Advancement of Mexican Americans, Cossaboom Family YMCA. Referral services are provided by Ripley House Community Health Center (Harris County) and Magnolia Health Center (City of Houston).
- ¹² To provide a facility that will meet primary/preventive health care and health education needs of the students of Jackson Middle School, their families, and surrounding community; to reinforce the fabric of community services by incorporating these vital and necessary neighborhood organizations into the physical environment of *Nuestra Clinica*; to design a facility that is non-threatening and inviting, and accessible to all regardless of racial, ethnic, cultural or socio-economic background; to integrate an educational component into the facility that will, in addition to strengthening the current delivery of health education to the students of JMS, provide health education to their families in the surrounding community; to provide a facility with adequate and appropriate space, clear, fluid circulation, and which meets the functional demands of patients and staff; to provide a facility which responds to the need for individual privacy, thus reflecting the importance attached to the delivery of care to individuals, in particular, teenagers who are experiencing the stresses associated with puberty.
- ¹³ For additional discussion on teaching strategies, critical pedagogy, and design studio formats, see Dr. Mark Gelernter, "Reviving Higher Education: Lessons from the Architectural Studio," and Terence W. O'Connor and Richard A. Quantz, "Critical Pedagogy, Cultural Politics, and Professional Education," both in *Architecture: Back... To... Life Proceedings of the 79th Annual Meeting of the Association of Collegiate Schools of Architecture*, ACSA Press, 1991.