

Innovative Teaching Manual

PROJECT TITLE

Adult Day Care Center

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PROJECT LEVEL

Second/Third Year

ABSTRACT

Students collaborate with community health care providers of adult day services and related campus disciplines (i.e. Gerontological Studies) to create an environment that will contribute to the health, safety, and welfare of a special and diverse population.

OBJECTIVES

- To gain proficiency in the development of a written program based on extensive research (i.e. literature review, interviews, observation, lectures).
- To develop a greater awareness of the field of health care design.
- To interact with other campus disciplines (i.e. Gerontological Studies) and community health care providers in providing data.
- To create a new, specialized environment in an existing space (adaptive reuse).
- To develop proficiency incorporating national codes, life safety codes, and ADA requirements.
- To recognize and supply standards and guidelines as set forth by governing agencies for adult day care facilities.
- To gain proficiency in space adjacency analysis.
- To utilize schematic drawings to show the progressive development of the design solution.
- To address lighting issues for special populations.
- To enhance space planning and furniture layout skills.
- To improve furniture, materials, and finish selection skills for a special population.
- To develop sensitivity to the third dimension with the construction of a color-rendered flip-up presentation model of specified space.
- To gain proficiency in graphic and verbal presentation skills.

CRITERIA

Project Format: This project was designed for a beginning commercial design studio. It is categorized as nonresidential and is an example of adaptive reuse of an existing facility. The design of an adult day care center addresses the growing need for the creation of healthy environments to serve special adult populations. The project involves the students in all phases of the design process from research to the formal design solution and formal presentation.

Problem Statement: A large metropolitan church in an affluent area of Houston, Texas has received a sizable monetary gift in honor of a long-time church member.

The funds have been designated for the design and development of an adult day care center that will occupy the vacated space at the end of the east wing of the original church school building. This site was selected because of the adjoining tree-shaded fenced area to the east, which will allow for outdoor activities. A covered drop-off area is on the north side. The donor, church board, and future day care director would like this center to serve as a model (state-of-the-art facility) for other centers with the need of adult day care facilities increasing as the population ages. (See footprint)

The architectural board at the church has hired your design firm to creatively address issues related to lighting, use of color, acoustical needs, wayfinding/signage, and accessibility within the space as they relate to the health, safety, and welfare of the users and caregivers. They would like a very comfortable, home-like environment designed to serve the needs of adults with various impairments and disabilities. Only individuals in the very early stages of dementia will be able to participate. Those in more advanced stages will require a facility with more assisted care. The space will serve as many as 25 to 30 adults ("participants" as they are referred to at the center) and a staff of 5 to 8 (nurse and assistant, director, assistant director, volunteer staff, and cook/dietitian at a given time. The specified areas used by participants should be designed for ease of observation by staff at all times.

The available space is a 3750 square foot rectangular area (slab on grade) with a 10 foot high, 2'x2' acoustical tile ceiling. The desired square footage of each space listed below is a close approximation based on need. Because the specified areas should be easily defined and accessible, some circulation may be incorporated into open space. All doors are standard, metal-framed, three foot wide exterior doors with a glazed inset. Windows are 3'x5' metal-framed, single sash and set at 18 inches AFF.

All spaces must be ADA compliant and meet standards and guidelines as set forth by the National Institute on Adult Day Care, Washington D.C., National Council on Aging. Life Safety Code, SBC/ICC, and local building codes should be addressed.

Project Requirements:

- 1) ENTRANCE (Welcome area): (50 sq. ft.) small table for sign-in/small chair or bench
- 2) PERSONAL STORAGE AREA "CUBBIES": (130 sq. ft.) 30 "cubbies" for personal belongings with area to hang coats or wraps
- 3) DIRECTOR'S OFFICE: (180 sq. ft.) desk with return for computer, executive chair, 42" four-drawer lateral file, small bookcase, one side chair, small conference table to accommodate four
- 4) ASSISTANT DIRECTOR/SECRETARIAL SUPPORT/VOLUNTEERS: (130 sq. ft.) desk with return for computer, one desk chair, copier, fax, standard four-drawer file cabinet, small credenza/bookcase
- 5) BREAK ROOM FOR STAFF: (120 sq. ft.) kitchenette with under counter refrigerator, small sink, microwave, small table, comfortable seating for two or three at a time, secure personal storage area
- 6) MAIN ACTIVITY AREA: large, flexible open space (750 sq. ft.) socializing, exercising, special programs, etc.; flexible seating arrangements with small sofas, chairs easily repositioned to meet specific needs (include recliners), portable wall partition may be used, one to two game tables to accommodate four chairs each, television alcove

- 7) QUIET AREA: reading/resting area (200 sq. ft.) comfortable seating for 8 to 10 (include at least three to four recliners)
- 8) NURSE'S STATION: (300 sq. ft.) 12 linear feet of counter area with upper and lower cabinets, a small sink, and a lowered desk area 30" in height by 42" wide, 2 side chairs, two-drawer file in base cabinet, a small private treatment area with bed and bedside table, bathroom area with accessible water closet, shower to accommodate a wheelchair, and lavatory
- 9) PERSONAL CARE AREA: (100 sq. ft.) small sink, station for hair care with mirror, portable cart for storage
- 10) RESTROOMS FOR PARTICIPANTS:
 - a. MALE: (120-135 sq. ft.) three stalls (two barrier-free, allowing space for personal assistance), one urinal, two sinks, and one hand-dryer
 - b. FEMALE: (135-165 sq. ft.) four stalls (two barrier-free, allowing space for personal assistance), two sinks, and one hand-dryer
- 11) RESTROOM FOR STAFF AND VISITORS: (42 sq. ft.) water closet, lavatory, hand dryer
- 12) KITCHEN/DINING AREA/CRAFT AREA: (600 sq. ft.)
 - a. FULL-SIZE KITCHEN: range with convection oven, large refrigerator/freezer, double sink, microwave, upper and base cabinets with a lowered counter area at a height of 30" by 42" wide, small pantry area, an area for serving is desirable
 - * Kitchen should provide enough privacy to ensure the safety of participants.
 - b. DINING AREA: four to five 48" round pedestal tables to accommodate up to six chairs (a sturdy, stackable type with arms)
 - c. CRAFT AREA: activities will take place in the dining area
 - * While most lunch meals are catered in, snacks in the morning and afternoon are prepared on site. A full-time cook/dietitian may be hired in the future.
- 13) STORAGE: (120 sq. ft.) Storage should be easily accessible to main activity area and kitchen/dining/craft area. This space is primarily used for storage of tables and chairs, craft supplies, and equipment for various activities. Include 24 linear feet of open shelving.
- 14) WASHER/DRYER/CLEANING SUPPLIES: Creatively incorporate a small area for emergency needs. Linens are supplied daily through a service. Daily cleaning is provided.
- 15) WATER FOUNTAIN OR COOLER: adjacent to main Activity Area

CIRCULATION: meet all necessary requirements - main circulation paths may overlap open areas. Allow 25% of available space for circulation. Plan creatively!

PROCESS

DESIGN ANALYSIS - Research and Programming

Phase I - Research

- 1) introduce project
- 2) research adult day care via periodicals, journals, brochures, and websites (min. three web citations) - prepare literature review
- 3) visit Gerontological Studies - interview professor and discuss issues related to aging (psychological, sociological, and physiological needs and changes)
- 4) visit two to three existing adult day care centers - observe, sketch, interview healthcare providers discuss findings
- 5) develop written program

Phase II - Concept Development

- 1) create adjacency matrix based on research and project requirements
- 2) further develop concept by listing fifty descriptive words or phrases that describe the space - create word analogies and concept squares (Leigh, 1999)

DESIGN SYNTHESIS

Phase III - Design Development

- 1) begin preliminary schematics - bubble diagrams, block plans
- 2) refine space planning and furniture/equipment layout
- 3) select materials and finishes as specified
- 4) complete graphic ideation of interior, including flip-up model
- 5) prepare presentation layout
- 6) complete all project requirements

Formal Presentation

PRESENTATION

FORMAL WRITTEN PROGRAM in three-ring binder. Include pockets with all schematics. Include documentation of all research.

BOARD LAYOUTS TO INCLUDE

- 1) floor plans of spatial layout of specified areas - 1/8" = 1'
- 2) floor plan/furniture plan - 1/4" = 1'
- 3) color-rendered perspective of interior (must exemplify your design concept)
- 4) sample board with materials and finishes for all floors, walls, ceilings, window treatments, and built-ins
- 5) color-rendered flip-up model of main activity area - mount on black foam core
- 6) reflected ceiling/lighting plan on mylar overlay - in pocket on back of board

BOUND CLIENT PROGRAM TO INCLUDE

- 1) formal title page
- 2) design concept
- 3) concept statements - justifying the following recommendations: color palette, lighting (be specific and detailed); acoustical concerns; accessibility needs; signage and wayfinding; suggested furniture style/type, finishes, and materials as best meet the needs of the users
- 4) reduced copy of floor plan with furniture layout

EVALUATION

30% Research

40% Design Development (Space Planning/Problem Solving)

10% Flip-up model of designed area

10% Visual/Verbal Presentation

10% Professionalism/Craftsmanship

100%

PROJECT LENGTH

Six to eight weeks

RESOURCES

About Adult Day Care. (1986). National Institute on Adult Day Care. [Brochure]. Washington D.C.: National Council on Aging, Inc.

American National Standards Institute, Inc. (1998). Accessible and usable buildings and facilities. (ICC/ANSI A117.1-1998). New York: Author.

Bush-Brown, A. & Davis, E. (1992). Adult day care centers. Hospitable Design for Healthcare and Senior Communities. New York: Van Nostrand Reinhold.

Harmon, S.K. (1994). The codes guidebook for interiors. New York: Wiley & Sons.

Huelat, B. & Parimucha, J. (Speakers). (1992). Technical aspects of healthcare interiors. San Diego, CA. Fifth National Symposium on Healthcare Design.

Leibrock, C. (1993) Beautiful barrier-free: A visual guide to accessibility. New York: Van Nostrand Reinhold.

Leigh, K.E. (2000, March). Creativity and concept-based design: A system for Learning. Paper presentation at the Interior Design Educators Council, 2000 Conference, Calgary, Alberta.

Mace, R. (1991). The accessible housing design file. (Barrier Free Environments, Inc.) New York: Van Nostrand Reinhold.

Malkin, J. (1992). Health care design. ASID Professional Practice Manual. New York: Whitney Library of Design

Marberry, S. & Zagon, L. (1995). The power of color: Creating healthy interior spaces. New York: Wiley & Sons.

National Adult Day Services Association. (1997). Standards and guidelines for adult day services. (3rd Ed.) Washington D.C.: National Council on the Aging, Inc.

National Fire Protection Association. (1997). NFPA 101, Life safety code. Quincy, MA: National Fire Protection Association.

Reznikoff, S. (1986). Interior graphic and design standards. New York: Whitney Library of Design.

Seek, J. (1992). Health care design. ASID Professional Practice Manual. New York: Whitney Library of Design.

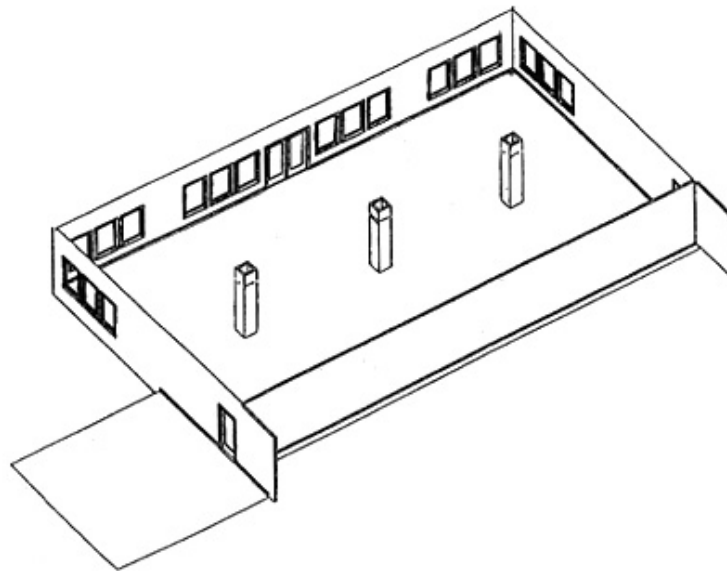
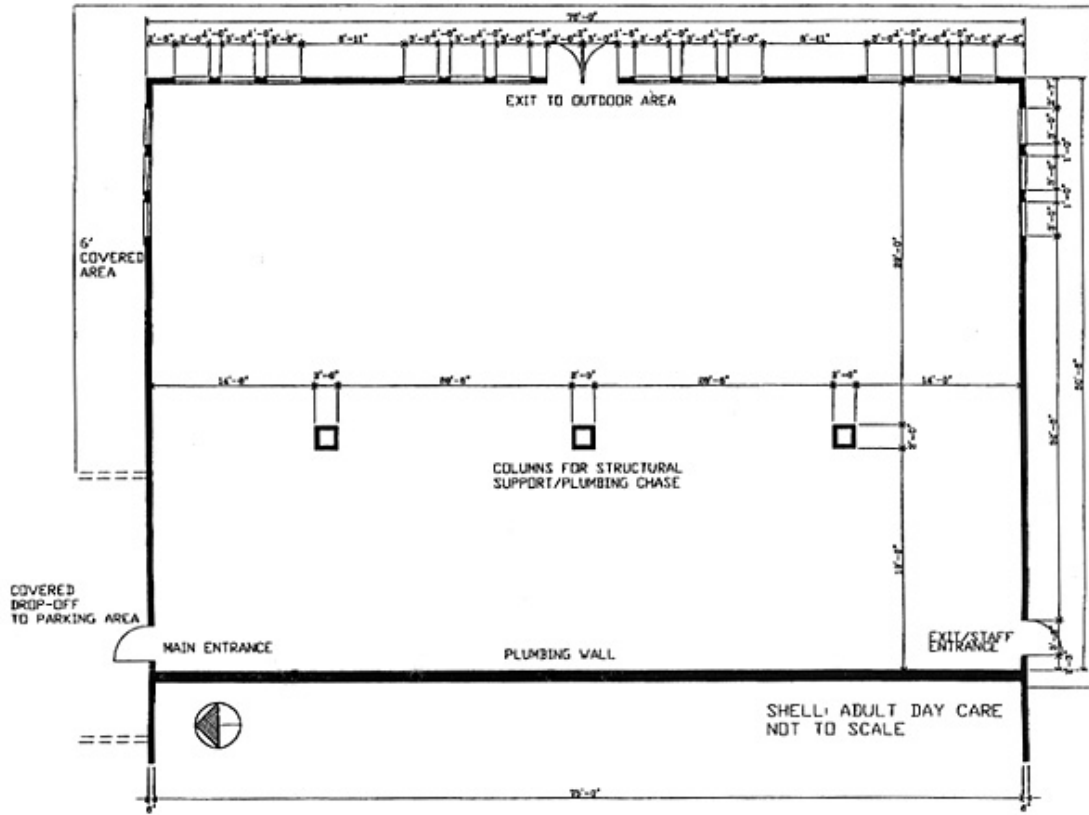
Southern Building Code Congress International (1997). Standard building code. Birmingham, AL: Author.

CREDITS

This project was developed after my involvement with the Center for the Studies on Aging and personal research related to the relationship of the physical environment and the behavior of older adults. I also developed a presentation entitled, *Adult Day Care Centers: Interior Design Solutions That Contribute to the Health, Safety, and Welfare of Users and Caregivers*, which was presented at a conference for Adult Day Services providers - June, 1996 (sponsored by The Center for the Studies on Aging, University of North Texas).

DOCUMENTATION
Student Project

Handout



Board 1

DESIGN CONCEPT

The existing space at the end of the existing church school building was designated for the development of an adult day care center. The area shown serves as a facility that has the ability to meet all of the participants' needs and personal desires. The design must meet all local and state codes as well as ADA standards. Many choices of materials and finishes were selected for the environment. The environment of the space is comfortable, homelike, inviting, natural and traditional. Cross of Care is designed to accommodate 25 to 30 participants and five to eight staff members. The area is designed to create an open feeling by incorporating large windows, natural light, and views of the outdoors. The space is designed to encourage interaction and social activities. The space was designed to meet the needs of the participants to feel, relax, and receive personal attention away from the activity of others. Special attention was paid between the main activity area and the dining staff area. The space flow plan includes safe travel pathways and easily accessible facilities.

CROSS OF CARE
 ADULT DAY CARE CENTER
 1000 S. 10th St.
 Phoenix, AZ 85006
 (602) 254-1111

Board 2

FLOOR PLAN

RECEPTION
 WAITING AREA
 ACTIVITY ROOM
 DINING ROOM
 KITCHEN
 OFFICE
 BATH
 STORAGE
 ENTRY

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Board 3



Model 1

