

# CREATING NURSING'S NEW ACADEMIC SPACES: MAKING DREAMS COME TRUE



ANNE R. BAVIER, PhD, RN, FAAN\* AND ROBERT N. BAVIER, M.ARCH., AIA, LEED†

After a description of the approval process for new construction, this article examines the design–bid–build delivery method because it is the most traditional, by defining and exploring each of the major construction phases: programming, cost estimates, preliminary design, schematic design, design development, construction drawings, bidding/negotiation, construction and, finally, move-in, and occupancy. Viewpoints of key players are examined to understand how the nursing dean in partnership with the architect shepherd nursing's dream into reality. Using a recent building project as an exemplar, Dr. Bavier shares her work as dean, and Mr. Bavier, as an architect specializing in education facilities, shares his planning and design experiences on several academic facilities. The outcome is information and guidance for deans to use their collaboration with the architect and other team members to assure a custom-tailored nursing education facility. (Index words: Nursing; Education; Architecture; Facilities; Design; Dean; Architect) *J Prof Nurs* 32:213–223, 2016. © 2016 Elsevier Inc. All rights reserved.

## Overview

WITH TODAY'S NURSING shortages, there is fierce pressure on schools of nursing to expand their enrollments (Aiken, Cheung, & Olds, 2009; American Association of Colleges of Nursing - Nursing Shortage, 2014). The pressure to expand coupled with exigent faculty shortages (American Association of Colleges of Nursing - Nursing Faculty Shortage, 2015) has prompted the rapid expansion of nursing pedagogy, including rigorous research on various strategies (Tanner, 2010) and expansion of simulation (Galloway, 2009). The pressures of more students, new technology resources, limited faculty, and clinical placements led many deans to seek and obtain significant support for designing and building a proper home for nursing education. The confluence of these forces provides a rare opportunity for nursing education—building its own spaces. Yet, the literature on how to take those dreams into bricks and mortar rarely recognizes the dean's critical role; instead, the existing literature targets clinical nursing leaders who are building patient care facilities (Ferenc, 2015; Hardy & Lustig, 2014). The purpose of this article is to provide

deans with an understanding of the design–bid–build process used for construction and renovation of academic spaces. The emphasis is in the contributions deans and their designated point person can make to each stage of the process. This article posits that active involvement of the dean and future users make the visions of academic spaces for nursing a reality. It emphasizes the importance of early attention to design and function to saving money in the construction phase and bringing the project to completion within budget.

## Approvals

Before anything can happen, each institution has an approval process for considering new construction and renovation. Typical processes include approval by senior university officials, especially the provost and president and, then, the respective governing body, such as the board of trustees. Additional approvals outside the institution may be required, such as the board of regents or the state board of education. The basic approval request consists of a need statement, site identification, and a cost estimate.

## Needs Statement

Need statements should be concise and as data rich as possible. Useful information includes limitation of current facilities, such as the need to have multiple sections of a course because no room would simultaneously accommodate all the students for whom the course is required. Note that space limitations may increase cost because of the need to hire more faculty for multiple sections.

\*Dean and Professor, College of Nursing and Health Innovation, University of Texas at Arlington, TX.

†President, Bavier3P Arlington, TX.

Address correspondence to Dr. Bavier: University of Texas at Arlington, College of Nursing and Health Innovation, 411 S. Nedderman Drive, Arlington, TX 76019. E-mail: bavier@uta.edu 8755-7223

A major component typically describes escalating applicant pools and rejection of qualified applicants because of lack of space, for example, simulation laboratories; these demands can be put into the context of not meeting the region's and nation's pressing needs for nurses. Pictures help too. A photograph of a faculty member running a clinical conference in the stairwell can speak volumes about the lack of small conference rooms.

### Site Identification

Site identification typically involves campus facilities staff. An aerial view of the campus showing the current building and proposed site is needed. If a master campus plan exists, it will list the philosophy of facility placement and potential sites; use it.

### Cost Estimates

Cost estimates, which happen throughout a project, begin here. Estimates come from a variety of experts, often a construction expert within the institution's facilities department but can also be from an independent cost consultant.

Programmers will ask what kinds of spaces are needed. Information may include number of faculty offices, classrooms to seat a specified number of students, conference rooms and laboratories for scientists, skills laboratories for undergraduate, and/or graduate students. Note that room sizes are only 40%–60% of the total square footage (net square footage). Hallways, mechanical spaces, utility/storage rooms, restrooms, wall thickness, and stairwells take the remaining space. The architectural design plus specific requirements, like exhaust fans in chemistry laboratories, account for the range of usable net square footage. Finally, a formula of dollars per square foot is applied to give an estimate. Deans need to know what costs are included in the formula, such as audiovisual equipment for classrooms or new office furniture. If unique equipment needs to be added, such as hospital-style head walls for the simulation rooms, now is the time to inform the programmers and request adjustments.

The final factor in the cost estimate is the source of funds. The preferred strategy is for the estimated cost to equal the funds available, so the approval to build is not linked to a request for money. The institution may receive money from donors and/or the legislature. Some buildings are financed when the institution sells property or a facility to another entity. Deans may be expected to raise private donations prior to proceeding with approval requests. The availability of funds may be used to reduce the size of the proposed project. In the exemplar below, the cost estimate was \$7 million because that amount was already available.

### Local Approvals

With institutional approvals finalized, the institution will seek local approvals from the surrounding community. Such processes are dictated by local laws and regulations and by the institution's desire to be good neighbors. The facilities and legal staff prepare documents, and although the dean may not be involved, it is useful to request a briefing on what is

happening. Alumni and friends expect the dean to be knowledgeable about the current status. Community relations staff may orchestrate neighborhood briefings about the construction, and deans may be invited to participate.

## The Exemplar

As dean, the lead author headed the efforts to place an addition on a historic building that was surrounded by specimen trees, reflecting the university's origins as an agricultural college.<sup>1</sup> The historic building would need some work, for example, the roof leaked regularly after snow storms and the winter winds blasted through the old windows. The building was the oldest brick building on campus and originally was a men's dormitory, with common areas at both ends of the I-shaped structure. Previous renovations had replaced some infrastructure elements, like the heating system, and added an elevator but other items, like the bathrooms, were untouched. The historic building required that all work be approved by the historic commission, and the removal of specimen trees required approval of the state's arborist.

The nursing dean has assessed the needs, weighed the alternatives, interviewed the players, forecast the future, planned the spaces, dreamed the dreams, made the presentations, and raised the cash. Approvals have all been obtained. It has simultaneously been exciting and exhausting. Now all agree it is time (at last!) for the school of nursing to have appropriate spaces to prepare its students for their 21st century nursing workplaces. Everything's ready to launch the new building, expansion, or renovation construction projects.

At this point, officials from your institution might deliver a "we'll take it from here" message because designing and building academic spaces is a routine part of the university's business, and deans do not know much about the ins and outs of construction projects. Deans do not know the planning process, players, and protocols needed to shepherd the dreams into bricks-and-mortar reality. Should deans just cross their fingers and let it go?

No. Deans can learn basics and be partnered with an architect who will share the vision, design the spaces, and jointly steward the vision through the entire project. The Dean is the best shepherd over the overall vision of the facility and the ensure it doesn't get lost amongst the technical details that is the domain of the architect. Together, deans and architects take full advantage of these processes, as they create a legacy for nursing education. Critical relationships with the contract specialists and builder are developed throughout the process.

## Selecting the Architectural Team: The Critical Beginning

Typically, the university releases funds to hire the architectural team first, which leads the project from the programming phase through development of construction documents.

Ideally, the dean and architect view one another as partners. Particularly in early phases, they make key

<sup>1</sup>The facility discussed is at the University of Connecticut, Storrs, CT.

Download English Version:

<https://daneshyari.com/en/article/2667923>

Download Persian Version:

<https://daneshyari.com/article/2667923>

[Daneshyari.com](https://daneshyari.com)