Find the Hidden Space on Your High-Density Campus

By Laura Vassilowitch

e all know what high density feels like: no open tables in the dining hall, bumping into a student as you round the corner heading to class, or sharing an office with another faculty member that barely fits your own furniture and reference materials.

Other than the occasional meal "to go" due to lack of available seating, what is the effect of a high campus density? At the simplest and most sharply evident level, a high-density campus experiences more wear and tear on the facilities, shortening life cycles, and an increased demand for capital resources to maintain and upgrade the more rapidly degenerating spaces.



Figure 1: Average # of Courses Per Semester/room

Centrally Controlled

Departmentally Controlled

THE HIGH-DENSITY SWORD

Thus appears the first edge of the high-density sword: The carpeting that should have lasted seven years lasts only five; the desks that get rearranged for 10 classes a day instead of six lose their "feet," and therefore their stability, faster. With the shortened life cycles of multiple components, the need for more frequent and more extensive renovations plagues the dense campus. However, once the resources are available for these renovations, the second side of the high-density sword makes an appearance: Where do we put these programs while renovating?

A DOUBLE-EDGED SWORD

Unlike the campuses on the low end of the spectrum, a high-density campus often cannot identify the swing space needed to relocate programs during renovations. But it is there. Every campus, no matter how dense, has some underutilized square footage. Let's examine three approaches to identifying underutilized academic space, to help dull the doubleedged sword of renovating a high-density campus.

1. Take back the space—For some programs, it makes sense to have a single department control the room schedule. After all, who wants to teach a music theory class in a biology lab? Recent assessments found that departmentally "owned" general purpose rooms, such as classrooms, lecture halls, and seminar rooms, hold fewer courses per semester than centrally controlled general purpose spaces on campus (see Figure 1).

Passing the scheduling reins for these spaces from the departments to the central scheduling office will allow multiple course subjects to utilize this square footage. Assuming that the average departmentally controlled space holds 60 to 75 percent of the course load of centrally controlled rooms, centralized scheduling of these spaces will release 25 to 40 percent of the square footage of these spaces for "swing space." With an average campus's general purpose teaching space inventory comprised of 30 percent departmentally controlled spaces, there are often significant opportunities to improve the utilization rates of these spaces and "find" the swing space needed for modest to major renovations.

2. *Rightsize the rooms*—If you are lucky enough to have had your academic space constructed entirely in the last five years, feel free to skip this section. But if you are like the majority of institutions, the teaching spaces on your campus were designed 15, 20, or even 30-plus years ago and are no longer ideal for modern teaching pedagogy and class sizes.

Many campuses are pushing to decrease the average course size and therefore improve the professor-student ratio without assessing how well their teaching spaces are designed to handle this shift. Whatever your faculty-student ratio may be,

it has no doubt changed from 20 years ago, while the capacity of available teaching spaces has stayed fairly constant.

Understanding the distribution of room capacities compared with the distribution of course sizes will likely reveal that the number of small course enrollments is proportionately larger than the ratio of correct-sized rooms to hold them, as the historic trend has been to decrease course sizes. This translates into rooms that are larger than needed; empty seats and unutilized space.

Suppose that three adjoining 45-person classrooms (approximately 900 square feet each) are each holding a maximum course size of 25 students. Reconfiguring these spaces during an interim session to form three spaces, each of which holds 25 students (approximately 500 square feet each), can maintain scheduling the same course load and release 1,200 square feet of space (see Figure 2).

3. Reassess the course schedule—Few self-respecting seniors would willingly sign up for an 8 a.m. class, let alone

Figure 2: Reconfigured Space

Original Design



Scheduled Space "Released" Space



one that meets on Fridays. In fact, many faculty members are equally unhappy about early-morning or late-afternoon courses. Typical institutions see room utilization rates before 9 a.m. and after 1 p.m. drop drastically from the midday peak periods.

This uneven distribution of scheduled courses throughout the day requires a larger inventory of teaching spaces to accommodate the volume of courses taught during the peak hours. By redistributing the same course schedule throughout the seven-hour period, a 60 percent utilization rate can be achieved. In fact, with this redistribution, the inventory of teaching spaces could be reduced by 20 percent and still support the same quantity of courses. Even minor reallocations of courses outside of current peak hours can result in the release of significant square footage.

A THIRD EDGE TO THE SWORD

Identifying underutilized square footage on a high-density campus is by no means an easy task, and the process of capturing that space requires cooperation and trust from the campus community (which is a proportionately larger community than that of a same-size, less-dense campus—a third edge to the sword, perhaps?).

The reality of a high-density campus is that any space not utilized to full potential will be taken over by someone or something. The three approaches outlined in this article will help identify the underutilized areas to ensure that the improved utilization of these spaces benefits not just a single individual or department, but has larger, campus-wide effects. (§)

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