

Space Utilization: **Optimization Strategies for the Campus of the Future**



Introduction

Traditionally, finance and facility managers at most higher education institutions are used to hearing academic department heads, residence life leaders and even administrators clamor for more space. “We don’t have enough room,” became a regular call for individuals who wanted greater control over the scheduling process. But the pandemic’s sudden and stark disruption to “normal” operations brought a uniquely shared experience that challenged the culture of higher education as a whole. Nearly every campus has seen some reduction in campus space utilization, and with the very notion of an academic community being redefined in real time, planners have begun raising questions about what kinds of classroom spaces will be needed in the future and how to optimize the physical footprint in continued service of the school’s educational mission.

For campus stewards, these questions have profound ramifications. Undoubtedly, the pandemic offered these stewards a clear and extreme example of what an overabundance of space, particularly classrooms, can do to college budgets in the short term. The ongoing growth in the backlog of deferred needs as renewal budgets likely stay flat or shrink paints a potentially painful image of the future. Pre-pandemic circumstances already presented their own unique challenges as the average U.S. classroom its own unique challenges, the average U.S. classroom before 2020 was occupied less than 60 percent of the available hours during a typically scheduled day. These compounding data points certainly suggest higher ed campuses needs to use less space as they simply can’t properly care for what’s been built, nor is the current space being utilized to its fullest capacity. Something has to give. So, where do you start?

A thorough utilization study of teaching spaces creates a strong foundation for documenting the real costs of operating campus facilities, identifying investment or divestment priorities, and revealing insight into the implications of inefficient scheduling models on spending waste. Whether enrollment or budgets are shrinking, growing, stable or variable, all institutions are candidates for a space utilization study.

Beginning a discussion around space utilization and finding “negotiation space” on campus has benefits for everyone involved:

- Institutions can respond strategically to changing enrollment and community expectations.
- Faculty and students gain a voice in improving and evolving the learning environment.
- Finance administrators can realize potential financial gains through better utilization of existing space.
- Registrars receive data that supports and centralizes scheduling efforts.
- Facilities managers gain a clear, actionable plan for classroom improvement, adaptation and optimization.

“The assessment gave us the hard dataset needed to inform conversations with faculty about our campus design parameters and utilization goals, and has become invaluable to us in the planning process.”

Brandi Hood, Senior Project Manager at Wesleyan University

5 Steps to Start the Space Discussion

Putting a plan and shared expectations in place can help lead a productive conversation about space management practices that recognizes needs, costs and academic aspirations.

Consider these tips:

1. **Start with the basics.** Having real-world, detailed utilization data is central to supporting this process.
2. **Gather the right people.** Everyone who will be impacted by a reimagining of space policies needs to be a part of this conversation. Engage key decision-makers across all departments during project kickoff. Acknowledge the conversation may be intense, but the payoff will be substantial because all needs and demands will be accounted for through the process.
3. **Get feedback.** Faculty, students and staff can provide critical insight into the space utilization patterns that emerge on campus. Use this insight to pinpoint lower-cost methods for increasing utilization, such as updating furniture, technology or acoustics.
4. **Get real.** Focus on data that clearly explains the operational and financial implications of inefficient space utilization and excess space demands. Compare your utilization findings against national trends. This benchmarking can effectively support an argument for how space management can improve the institution's financial performance while remaining competitive.
5. **Negotiate.** Work together to develop common sense solutions. Make sure everyone understands upfront that this process will demand compromise, but the benefits of this cost avoidance effort will be reaped by all parties involved.



Methods to Improve Campus Space Utilization

Regardless of what region you're in, changing enrollment dynamics are likely impacting the scheduling and usage demands of your spaces. For example, schools that have added new space to account for booming enrollment during growth periods may now be left with the operational costs of severely underutilized space. Right-sizing is about using space utilization data to find the optimal amount of space required to operate campus at current and projected capacities.

Making even small improvements to campus space utilization can lead to tremendous cost savings. It's a matter of finding the right strategy for your institution. Consider the following methods:

Change scheduling practices

In more cases than you might imagine, classes have often been held in rooms much larger than class enrollment requires. Many institutions are working from historic scheduling practices, rather than dynamic data. With opportunities emerging to embrace more digital and distant learning environments, examining scheduled class sizes and matching this to appropriately-sized classrooms is a simple yet effective way to improve space utilization.

For example, when the faculty at one small private college began applying pressure to add space, the CFO commissioned a space utilization study to see if the school could avoid the debt of a new building and the additional operating costs of maintaining the space. The study of existing space found many rooms were at 50 percent capacity due to rigid scheduling practices. Moreover, at the school's current growth rate, it would take 10 years for the campus to grow enough until it truly needed to add new space. This two-pronged argument set off an initiative to improve scheduling to use the existing space more effectively.



Negotiate space ownership

When the registrar has accurate insight into how rooms are being used, the office can make more informed decisions on how to efficiently schedule classes. By reevaluating the ownership of space in a fair and unbiased way through discussions with all stakeholders involved, it may be possible to reach compromises on how space is used that better serve the needs of the institution.

For example, one Texas university's examination of space utilization indicated the school's current footprint was on the verge of reaching its max capacity, but that wasn't the full story. Rather than respond with calls for new space, they examined how their use of certain departmentally-controlled spaces, classified using 20-year-old data about classroom sizes and not reported on by the departments, could be reimagined to meet new demands for more classroom space. By combining these rooms to double classroom size, updating seating arrangements and type and bringing technology up to date, those spaces could be reclassified, giving the registrar more control in effectively scheduling these updated spaces.

Take buildings offline

An institution may remove a building from its inventory for a number of reasons: The building may no longer meet programming needs; renovation may be far costlier than a complete replacement; or it may simply make sense to take the unneeded space offline to cut operational costs and reduce future capital demands. Regardless of the rationale, the decision to move any buildings offline can be a tough one as it requires a delicate balancing of the diverse community interests and qualities of space across campus. But with the all-too-familiar compression on facilities resources being signaled across the industry and the realization that there may be too much space to effectively steward already, new strategies for matching the built environment with changing demands will be required to maintain exceptional space portfolios.

Even if a clear cost case is made, securing campus-wide sponsorship can remain a challenge when the perception of space ownership is not evaluated in an objective way. In some cases, a third-party space utilization consultant can help overcome political disputes more effectively than a department at the center of these conversations.

"Integrated with our strategic capital plan, the [utilization] assessment enabled us to mobilize on the divestment of two high-deferred facilities and enact a no net new policy to pursue greater portfolio balance for the future."

Dr. Brad Sheriff, Vice Chancellor for Finance and Administration at University of Arkansas - Fort Smith

Achieving Your ROI: Why Space Should Be a Priority

The core goals of any space utilization assessment should be to maximize the return on the investments already made into existing teaching spaces, confirm active or inactive classrooms, and create priorities for their likely use going forward. By identifying areas of opportunity and strength, a complete space utilization assessment will ensure institutional leaders know what they're doing well and what they could be doing better. Fundamentally, it will help create a coherent space narrative, incorporating the expectations of the community and the demands of the facilities, that represents a shared agreement for how to best optimize service to academic aspirations and institutional mission.

Utilization studies will first and foremost identify opportunities within the physical environment and scheduling processes. If both of these elements are being optimized the study can throw into relief whether or not the institution's current funding model is sufficient to maintain existing assets. Having this big picture view can help financial and facilities leadership improve risk management strategies and their long-term planning, even when facing uncertain economic conditions and enrollment trends.

The cost savings from more effective space management are tremendous, and they can potentially be used over time to drive high-priority investment projects. Consider:

Every additional percentage point of improved space utilization can engage millions of dollars' worth of physical assets around campus.

Improving space usage not only avoids the costs of construction, but also the ongoing operational costs of new classroom buildings. And by identifying and addressing low-hanging fruit, institutional leaders can make improvements to space utilization without overspending. With data from a space utilization study, institutional leaders can develop a strategic list of necessary improvements so they can potentially bundle similar or co-located projects together and stretch each dollar further.

Through more effective asset management, college and university leaders can optimize their funding by filling spaces that are already cleaned, maintained and, most importantly, already built.

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