
# FUTURE-FOCUSED, TRADITION-BOUND: BUILDING A 21ST CENTURY CAMPUS

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# THE FUTURE OF HIGHER EDUCATION IS IN FLUX,

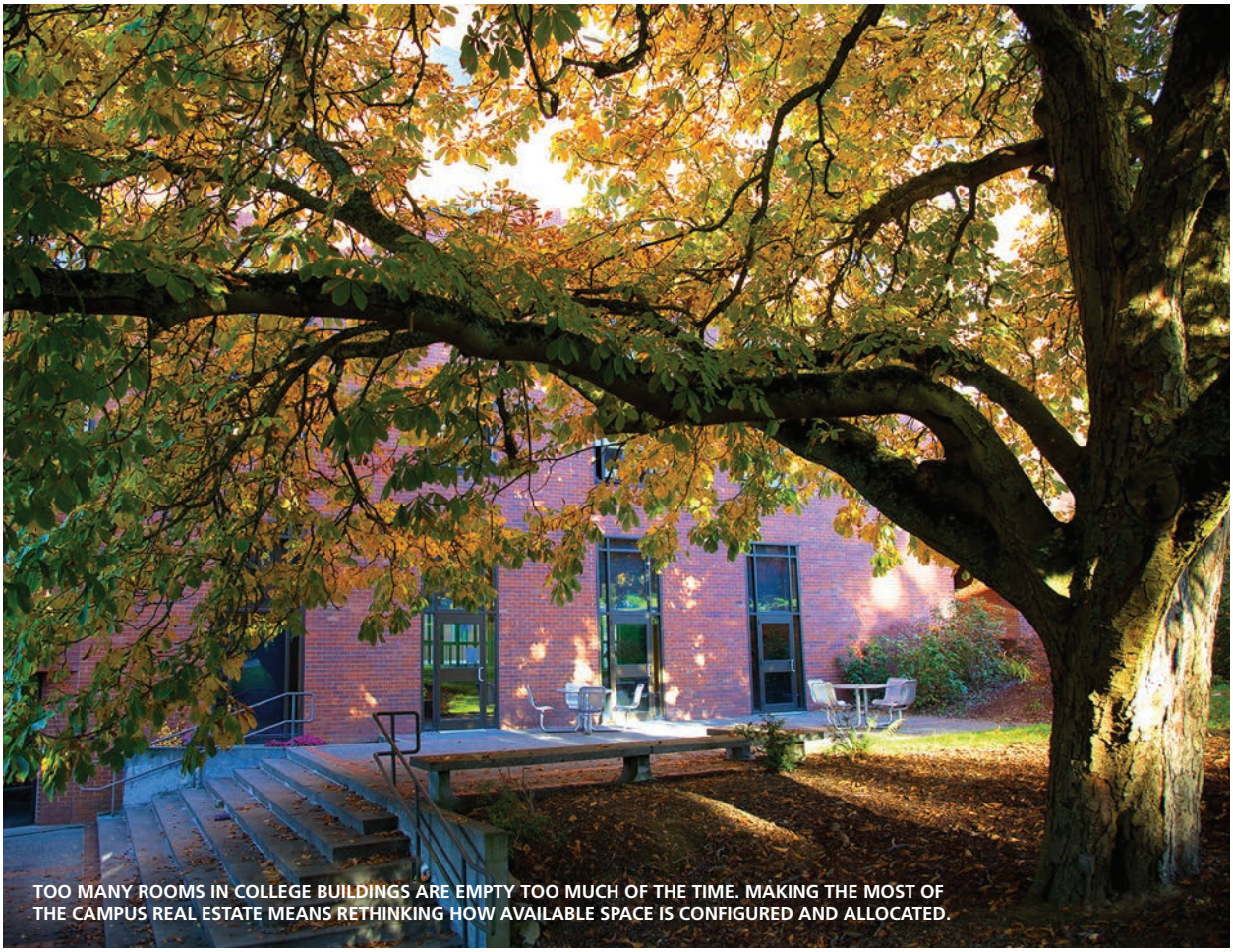
## WITH ECONOMIC PRESSURE AND TECHNOLOGICAL INNOVATION CHALLENGING THE CENTRAL VALUE PROPOSITION OF A TRADITIONAL COLLEGE EXPERIENCE.

**As a prospective student, do you join the high-stakes mania that now defines the university admissions process? Do you opt for the nearby community college? What's college for anyway? Are you supposed to be learning for life or training for a job? Maybe a gap year...**

Meanwhile, higher-ed leaders compete mightily for students caught in the choice-rich uncertainty. Community colleges tout practicality, affordability and, increasingly, a campus experience that rivals their four-year counterparts, who are busy upping the ante with amenity-rich residence halls and shiny new centers of excellence; all mount sophisticated marketing campaigns trumpeting the future-defining benefits of their cultures, campus and programs.

That future-ready stance is vital. Yet academia thrives on tradition, indeed is in many ways defined by it, for better and worse. Tradition is at once part of the draw — and a drawback. Therein lies the tension, and thus the essential question for those of us who plan and design campus facilities: how do you support the needs of the future in ways that enhance institutional legacy? Is it possible to keep the good (bricks, ivy) and jettison the bad (silos, turf wars)? In other words, how do you use facilities to make your campus as competitive as possible?

This is not just a new-building question, although it's tempting to answer it that way — it's easy enough to see how a swank new student center or state-of-the-art STEM facility enhances institutional competitiveness. Less obvious are the opportunities on the old-building side, but they can be every bit as profound. Here are three key trends shaping the campus of the future.



TOO MANY ROOMS IN COLLEGE BUILDINGS ARE EMPTY TOO MUCH OF THE TIME. MAKING THE MOST OF THE CAMPUS REAL ESTATE MEANS RETHINKING HOW AVAILABLE SPACE IS CONFIGURED AND ALLOCATED.

**FEWER DARK SPACES**

Much of this is simply about more efficient use of real estate— decreasing, if not eliminating, the amount of under-used space. But it also presents an opportunity to respond to other campus trends, including more inter-disciplinary endeavors at a department level, more small-group work on a student level and perhaps even more community connections on an institutional level.

The fact is, despite higher-than-ever enrollment levels, too many rooms in college buildings are empty too much of the time. One obvious example: walk down the corridors of any building on a Friday afternoon and note — nothing. You can hold a class on Friday, but who will come? While this is an excellent case for committing to a career in academia, it's a bad real estate real strategy. Will this particular aspect of the college culture change? Not likely, at least not anytime soon. Can it be used as an opportunity to break down departmental silos, perhaps by converting some space to other uses and creating shared-space options? Yes - in some cases. Western Washington University's (WWU) Digital Media Center took an activity that multiple departments wanted on their own and located it in the library as a resource for all. More funding was made available and the Digital Media Center is much more robust as a result. Sometimes under-utilized space can serve broader college needs. Western's music department, for example, has the ability to provide community access to its rooms when not in use by students. Regardless, in solving the logistical puzzle of spatial needs based on schedule, discipline and department, the goal is to get creative in the name of making better use of available space.

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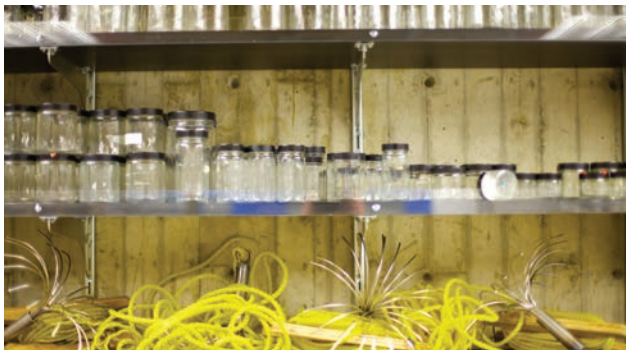

**Converge, retreat, repeat. This is the cadence of problem solving, and it's making its way to campus near you.**

RMC's work in this area ranges from revising classroom layouts to match current teaching modes to working with educators to incorporate technology (connections, tools) and furnishings (mutable and mobile) so rooms can function in a variety of formats, to creating new uses from found space.

The results are both physical and behavioral: more multipurpose, flexible space, more sharing, pooled resources and increased collaboration. That's the upside. The potential downside, for some, is loss of autonomy or ownership — perceived if not actual. Success relies not only on smart spatial and furniture solutions, but also on establishing new protocols and communication lines.

**ENABLING MORE MEDIA CREATION AND SHARING**

Visual literacy is described as "the ability to interpret, negotiate and make meaning from information presented in the form of an image." WWU's Marc Geisler, Associate Dean of the College of Humanities and Social Sciences, calls changes in this arena revolutionary — akin to those wrought by the printing press. It's an increasingly vital aspect of education at all levels, and Western is meeting the growing demand.

As mentioned above, RMC recently completed WWU's Digital Media Center, a multidisciplinary resource lab for instruction of broadcast, production and editing of digital media. Located in Wilson Library, the project coalesced as a result of multiple requests percolating from several departments. Ultimately five colleges, four departments and three other campus user groups came together for the project, which, while complicated, was also inspiring for the convergence of ideas it represented. The library became the most logical place to house the center, making it an all-campus rather than departmental resource.

The Digital Media Center is a potent example of media creation and sharing on a college campus, but it is hardly the only one. In fact, media has become a ubiquitous fact of everyday life and more prosaic accommodations (often called "mediated" facilities) are being made for accessing, sharing and creating media everywhere on campus, from classroom to dorm room and everyplace in between.

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**BIG DATA FOR BETTER BUILDINGS** >> Big data is rippling across campuses, tantalizing researchers, recruiters and educators alike with its potential to fine-tune success. Facility leaders have the same opportunity. As architects serving the ongoing needs of four higher-education institutions in our region, we see ways to make the most of facility dollars through more streamlined processes and tools. One is through the use of consultant documents beyond their deployment as construction drawings. As a component of asset management, the databases built into drafting software can make life easier for facility management by tracking specifications, life-cycle, cost parameters and other variables for every element of every building, from simple doorknobs to complex mechanical systems. If efficient ways to making your building work, and work better longer, is the goal, then fingertip access to the right information is the place to start.


LOCATED NEAR THE WATERFRONT, THE TECHNOLOGY DEVELOPMENT CENTER REPRESENTS AN ALLIANCE BETWEEN WWU'S COLLEGE OF SCIENCES AND TECHNOLOGY, BELLINGHAM TECHNICAL COLLEGE AND THE PORT OF BELLINGHAM.

## We expect to see more campus-to-community connections, both for direct funding opportunities as well as the benefits associated with more visibility and collaboration.

**FOSTERING COLLABORATION AND CREATIVITY AT INDIVIDUAL, INSTITUTIONAL AND COMMUNITY LEVELS.** Anyone who's been in an office lately recognizes this trend, but the innovation imperative is not just a private sector phenomenon. Teaching and learning models are evolving in ways that require more group problem solving and presentation, taking advantage of new tools and approaches that both reflect and direct life in a complex and diverse global landscape. Meanwhile, the institution hones its competitive edge in part by cultivating creative partnerships.

The pedagogical changes demand spaces that encourage informal interaction and creative work on the one hand, and support deep processing or synthesis on the other. Converge, retreat, repeat. This is the cadence of problem solving, and it's making its way to a campus near you.

While easily designed into new buildings, adapting older buildings to serve this new purpose is a more creative exercise. In both cases, the goal is to provide flex spaces that are fluid enough to serve a small-group brainstorm session in one instance, individual pursuits in another and socializing whenever. Varied light sources, including ample daylight, soft seating and tools like white boards on wheels and wifi, as well as food and beverage options characterize these spaces. They might be carved out of circulation or common areas in dorms, outside traditional teaching rooms, or in the library. The library itself has become a multi-use facility, complete with lounges, food, and group-work areas in addition to the traditional quiet study and solo research efforts. Fortunately, these informal gathering zones located in "found" areas are now being counted as official program space, which boosts real estate efficiency ratings—important when it comes to funding.

Places where people can be "alone together" are part of this trend (café as study or meeting space; lobby as living room) as is the idea of the flipped classroom,

where, like the classrooms RMC recently designed for Western's Environmental Studies urban planning studio, the classroom is primarily in workshop mode, with in-class time spent on exercises, project work and discussion. Most lectures happen digitally, on the student's own time, thus reversing the traditional teaching model.

Setup for group work – classroom, library or otherwise — is heavily reliant on the right furniture, media connections and tools, such as movable tables with monitors that can be positioned for individual or shared use, and large screens for presenting, as in Western's School of Economics' new finance lab. These tools are expensive, and, in the case of the finance lab, made possible by a partnership with private-sector funder Saturna Capital. An electronics lab for the Engineering and Design Department in the College of Science and Engineering was similarly supported by local employer Alpha Tech. The design implications manifest primarily as an element of uncertainty – funding isn't always known at the project outset since user groups cultivate these private relationships, with varying degrees of success.

We expect to see more of these types of collaborations as campus-to-community connections increase, not only for direct funding opportunities, but also for longer-term enrichment opportunities related to visibility and collaboration.

The Technology Development Center (TDC) is a case in point. The TDC is the result of an alliance between Western Washington University's College of Sciences and Technology, Bellingham Technical College and the Port of Bellingham. Funded in large part by a state innovation-zone grant, the overall aim is to promote economic development through private-sector innovation. Located adjacent to Bellingham Bay in a vacant warehouse, the 10,000- square-foot-center provides instructional and lab spaces to companies with ideas and faculty with know-how, and gives students a chance to solve real-world scientific and technical problems related to advanced manufacturing, vehicle design and renewable energy.

As Port of Bellingham property on the former Georgia-Pacific site continues to develop, long-discussed ideas of a collegiate presence on the

WILSON LIBRARY (L); ADVANCED MATERIALS SCIENCE AND ENGINEERING CENTER LAB (R); WESTERN WASHINGTON UNIVERSITY.

**BETTER LEARNING THROUGH CHALK DUST?** >> Some math professors at WWU won't give up their blackboards. Are they hopelessly outdated or hopefully prescient? *Blackboards* have mostly given way to *dry-erase white boards*, which in turn gave way to *interactive display devices designed to capture and redeploy instructional information*. Sounds great in theory, but in practice? Blackboards come with chalk, whose tactile nature brings its own benefits. (One professor at McGill University argues convincingly that his students are more actively engaged when he uses chalk.) Perhaps the math professors understand numerically what humanities professors see literally: the more words you need to describe an object, the more cumbersome it will be. If economy = elegance, and elegance=function, then blackboards = best tool.

WILSON LIBRARY, WESTERN WASHINGTON UNIVERSITY.

waterfront will come to the fore, along with questions of architectural significance. What does a university building look like when it moves off campus? How does it best represent the institution? How does a landmark fit in while standing out? How do we make connections to the main campus? What kinds of public spaces should it incorporate? Are there other uses that make sense to associate with it and if so, who pays for it?

Fun questions to consider, especially for a hometown architect with visions of a vibrant waterfront. In the meantime, consider one of the most promising trends we've experienced on the college campus: the power of interdisciplinary work. Bringing multiple departments into the Digital Media Center project at Western resulted in a far better facility than any one department could have sponsored, with more far-reaching effects. Equally exciting? The serendipitous connections people made as a result of rubbing elbows on this project. Encounters like this are the holy grail of innovation-seekers since they often result in new ideas. One on this project involved literature faculty hatching plans with the theater department to study particular subjects, for example, the multiple texts of Salome. Who knows what could be next? Business school and theater students collaborating for new ways to fund the arts? Science and humanities faculty teaming up for improved science literacy? That's some cross-cultural understanding in action, for the betterment of all involved. Isn't that what higher education is all about?

## WHO KNOWS WHAT COULD BE NEXT?

## BUSINESS SCHOOL AND THEATER STUDENTS COLLABORATING FOR NEW WAYS TO FUND THE ARTS?

## SCIENCE AND HUMANITIES FACULTY TEAMING UP FOR IMPROVED SCIENCE LITERACY? THAT WOULD BE SOME CROSS-CULTURAL UNDERSTANDING IN ACTION, FOR THE BETTERMENT OF ALL. ISN'T THAT WHAT HIGHER EDUCATION IS ALL ABOUT?

# SIX WAYS TO BUILD A HAPPY CAMPUS

**1 >> SHARPEN YOUR COMPETITIVE EDGE** with projects that balance future-ready function (integrated, versatile) campus tradition (place, identity) and student-focused amenities (food, ubiquitous wifi). On deck? A resilience mindset. Near- or at zero-impact systems and buildings; projects that promote wellness and health; more shared uses and porous campus borders.

**2 >> JOIN THE SHARING ECONOMY:** Start with interdepartmental space sharing and see benefits like more funding, higher quality, new efficiencies and silo breakdown.

**3 >> LEVERAGE THE LIBRARY.** As a mixed-use facility for students and faculty to gather, study, learn and work, it's the heart of the campus, a hub of intellectual and collegial engagement and logical neutral ground for collaboration — student, faculty, departmental.

**4 >> HELP OCCUPANTS SHIFT SEAMLESSLY.** Build on the digital media proliferation by building fewer single-use spaces. Flexible, adaptable spaces with crossover uses support the fluid way students and teachers engage with each other and their academic pursuits.

**5 >> CROSS THE MOAT.** As universities foster closer connections with community, business, government and non-profits, they lose their "castle on the hill" seclusion. Permeable borders offer new opportunities to stake out a relevant and visible presence beyond campus.

**6 >> HARNESS DEEP FACILITY DATA.** With every project, design teams develop volumes of data that can be used to optimize facility management processes. Use it!

RMC ARCHITECTS