

The University of Montana's Academic Future

Higher education is experiencing a watershed moment across the United States. Shifting student and societal needs, changing demographics (Grawe 2018; 2021), and the lasting impacts of the COVID-19 pandemic have all created unprecedented financial pressures that require colleges and universities of all types to redefine the inherent value of higher education in the face of new public mindsets and student expectations. Colleges and universities across the country are facing budgetary shortfalls and associated cuts. The institutions that survive, and in some cases thrive, will make long overdue innovations to both preserve and refresh the promise of higher education and move the higher education ecosystem in new directions. The University of Montana (UM) has the opportunity to take advantage of regional demographic trends which signal population growth in the West and increasing racial and ethnic diversity (Seltzer 2020; Grawe 2021, p. 52, 68). To succeed as a flagship for the future that draws upon its enviable location, UM must adapt its portfolio of degree and curricular offerings to offer flexibility with both breadth and depth, including relevant interdisciplinary and experiential learning pathways that are centered on student needs and are recognized by students, parents, and employers as leading to strong post-graduate outcomes. We must help UM students cultivate a tolerance for ambiguity and understand the complex interdependencies in a rapidly changing world. Our guiding purpose in supporting students includes providing timeless values and essential relevant skills so that the student of today can become an engaged and productive member of society tomorrow.

To that end, President Bodnar highlights the need for UM to combine its notable strengths in the liberal arts with experiential learning opportunities and co-curricular career skills development, leading to post-graduate success in today's complex world. Last fall, the President presented UM's academic leaders with the following charge:

Adapt our curricular and academic approach to more intentionally and explicitly build in our students foundational competencies such as problem-solving, critical thinking, information and data literacy, teamwork, leadership, creativity, and innovation; and

integrate significant experiential and work-based learning opportunities throughout every student's experience, ensuring all students have skills necessary for success in a competitive, dynamic job market.

How do we do this? First, we reject the mistaken notion that a focus on student outcomes and career preparedness somehow threatens to diminish a strong foundation in the liberal arts; on the contrary, these concepts are intimately entwined. There is abundant evidence that both employers and graduate schools seek students with a liberal arts foundation grounded in the humanities, social sciences, and natural sciences (Pasquerella 2019). An effective liberal arts education, where students learn to view issues with a critical and curious mindset from multiple angles, prepares them for the wide variety of career opportunities they will likely encounter in their lifetimes. Employers and graduate schools seek graduates who bring hands-on, real-world experiences that demonstrate the application of foundational knowledge and skills in a wide range of settings.

Over the past decade, the World Economic Forum list of top ten critical job skills has changed markedly to stress competencies a liberal arts education can provide, such as analytical thinking and innovation, creative problem-solving, and resilience, to name a few (Whiting 2020). In fact, many institutions across the country are embracing the liberal arts, including top military academies like West Point, as well as other institutions like Northeastern University, which has developed an Experiential Academics program within their College of Humanities and Social Sciences that includes the pillars of cooperative education, undergraduate research, study abroad, and service learning combined with the rigorous study of society, culture, politics, and ethics ("Experiential Academics" 2021). When intentional and facilitated professional and experiential training are combined with a liberal arts foundation, graduates are better positioned to work effectively in diverse teams that must contend with ambiguity and complexity (Aoun 2018).

Like Northeastern University, the University of Southern California (USC)'s Dornsife College of Letters, Arts and Sciences features the liberal arts as a component of its mission to give undergraduates the tools and knowledge to succeed after college ("USC Dana and David Dornsife College of Letters, Arts and Sciences" 2021). Recognizing the changing demographics and needs of today's students, USC Dornsife developed a complete overhaul of the student experience (McGroarty 2021). Key components include

- A revamped curriculum that includes numerous interdisciplinary degree offerings ("Majors and Minors" 2021);
- A reimagined first-year experience ("USC Core" 2021);
- The Dornsife Toolkit ("Dornsife Toolkit" 2021); and
- A collection of 2-credit classes that incorporate intellectual and practical skills that are typically acquired through work and life experience.

This holistic educational experience is best summarized by USC with their slogan, "Earning your undergraduate degree at USC Dornsife is the difference between a good education and a life-changing experience." We see this as a model that could be successfully implemented at UM at a smaller scale, as it is grounded in components that are already present at UM: broad-based interdisciplinary liberal arts education supported by student support services, with both experiential learning and career readiness opportunities embedded in the curriculum.

USC's Dornsife College is an example that buttresses the work of the University Design Team (UDT), most notably through the UDT's design principles and its study of *A Connected Curriculum* (Fung 2017). The design principles developed by the UDT derive from and are consistent with the group's research, which shows that to prepare students for success after college in an ever-changing society, universities must develop a curriculum that is interdisciplinary, student-centered, and in which students do extended research and have significant opportunities for experiential learning. The design principles emphasize impact, inquiry, innovation, internationalization, inclusivity, and interdisciplinarity as guideposts for UM's future. The UDT has offered a possible model for how the design principles could be

implemented and advanced: the *Connected Curriculum*, first articulated by Professor Dilly Fung at the University College of London. The *Connected Curriculum* is grounded in the science of learning and centers on the long-standing—but often not truly implemented—notion of undergraduate education driven by interdisciplinary inquiry, with close integration of research and creative work. The overarching concept is presented graphically in the figure below, adapted from Professor Fung’s book. The approach has been successfully adopted and implemented at University College London and University College Cork, both of which are international leaders in higher education that is research intensive and experientially grounded.

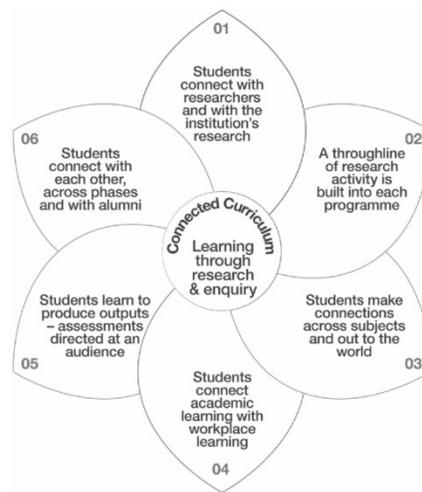


Fig. 1.1 The Connected Curriculum framework

Even with the Dornsife College and *Connected Curriculum* models, general education (Gen Ed) persists as a widespread challenge throughout higher education. And yet, Gen Ed represents an invaluable opportunity to apply concepts such as those in the *Connected Curriculum*. The institutions that have embraced bolder, more experiential and more interdisciplinary approaches to Gen Ed (e.g., USC’s Dornsife Core described above, Goucher College, Ripon College, College of William and Mary, Northern Illinois University, Virginia Tech, and the University of Colorado-Colorado Springs, to name a few) have seen strong increases in student satisfaction such that their ability to attract and retain students improves substantially. UM can become one of those institutions. This would require us to change both our philosophical and fiscal approaches to our educational core. It would mean eliminating obstructive fiscal incentives which lead to an overabundance of Gen Ed courses, and redesigning the core

curriculum to focus on the kinds of highly integrated, deeply experiential approaches students seek and employers value.

Despite the challenges of the last decade, UM boasts many of the strengths necessary to become an institution that is known for the quality of the undergraduate experience, such that it attracts and retains students. Data from prospective students show that compared to peer institutions, UM's size is an advantage—it allows students to access a flagship university's wide range of academic and social opportunities while engaging in classes, co-curricular opportunities and other educational modalities that allow for more intimate and tailored time with peers and professors. Most state universities cannot provide this 'big yet small' experience; UM can and does.

Experiential education, typically defined to include internships, undergraduate research, study abroad, and service learning, can be offered to all students at 'big yet small' institutions like UM. UM has a strong tradition of providing experiential education opportunities to students in all of its colleges; in the past, the administration has identified student engagement in experiential learning as part of UM's institutional goals (UM institutional assessment reports 2013-2015). There is ample opportunity to embed existing and new experiential learning opportunities in the curriculum for every UM undergraduate. The combination of experiential learning with a strong liberal arts foundation provides opportunities for synergies at a scale other universities cannot match.

We must approach this ideal in a way that ensures all students have access to experiential learning opportunities. For example, lower income students may not be able to afford an unpaid internship. Determining how to incorporate high-quality experiential learning opportunities while maintaining an equitable playing field for students will be a challenge to address.

Success in carrying out these exciting goals requires deliberate design for the outcomes we want. Recent market research indicates that UM has at least three significant challenges to overcome. Two are entwined with the academic enterprise: prospective students value academic quality and strong post-graduate outcomes. The third relates to prospective students and families favoring universities that offer a vibrant campus life. We are taking the market research and data provided by prospective students seriously. We must be willing to change the ways in which we deliver undergraduate education at UM. All of our undergraduate programs need to use flexible and adaptable curricula, combined with intentional experiential learning and career readiness experiences to build on our strengths and improve our academic offerings and quality, thus improving perceptions and UM's overall reputation. We should work toward presenting a diversity of offerings that encompass both the best of the liberal arts, as well as the more prescribed curricula of the professional colleges and schools.

Given UM's existing strengths and context as well as national trends in the higher education landscape, we see a future for UM in which we make changes that accomplish four goals:

1. Offer more opportunities for breadth (i.e., interdisciplinary degrees) while maintaining depth in strategic areas and diversity in our degree offerings.
2. Reimagine the first-year and Gen Ed experience to give students the opportunity to study real-world problems through an applied and interdisciplinary lens. The curriculum needs to appeal to student interests, which will improve students' perceptions of the academic quality of their UM experience.
3. Build intentional experiential learning paths (internships, undergraduate research, study abroad, and service learning) throughout each degree in ways that emphasize our unique 'big yet small' potential.
4. Improve perceptions of post-graduate outcomes by investing in alumni relations, strengthening ties to our recent graduates and using their success stories to strategically promote the UM undergraduate experience.

We need to make clear the connection between the subject matter and post-graduate opportunities, and intentionally build co-curricular experiences that will endow our students with the practical and career skills to succeed in their professional lives. We need to stay connected with our alumni and intentionally use their success stories as evidence of the impact of a UM education.

DRAFT

Methodology and Data to be Used for Instructional Staffing Plans across Colleges

As we adapt as an institution and set the future direction of our academic enterprise, the University must align instructional staffing expenditures to best meet our students' needs and to enable the long-term growth of the institution. Enrollment data is key in determining instructional staffing levels, but such decisions must also allow for strategic adjustments to support mission-critical programs and the enactment of the academic vision outlined above. The following gives a high-level overview of the process academic leaders will use to determine future staffing levels for departments across the university. This staffing level work is ongoing and will be informed not just by the metrics outlined below but also by our academic leaders' work with chairs and faculty, the input of the APG regarding the curricular and structural directions set out in this document and in the college plans, and the other strategic considerations.

The primary metric for aligning instructional resources to student demand is the ratio of student credit hours (SCH) to faculty FTE. The challenge is to find an appropriate baseline level for those student-faculty ratios to serve as a starting point. The University's own historical ratios offer the best available point of comparison to account for different teaching loads, course sizes, and unique program needs. During the period 2009-2013, UM had high enrollment and a stable budget. The University overall had a student-faculty ratio of approximately 19-1, the target set by OCHE guidelines. UM currently has a student-faculty ratio below 14-1. If each department had the same student-faculty ratio as it had during the period 2009-2013, the University as a whole should then have a ratio of approximately 19-1. And if the University could be successful with that student-faculty mix during the baseline period, a similar mix could be fiscally sustainable, though perhaps not desirable in terms of maintaining breadth of programming, today.

While student-faculty ratios offer a useful starting point, other factors must be taken into account to set staffing levels that promote the University's strategic objectives. Among the other objective factors are majors and degrees awarded, which illuminate other aspects of student demand, as well as residency mix and research productivity. Considerations that are difficult to measure with quantitative data are important as well. The University is much more than a collection of units that can be counted. Building the UM of the future requires a focus on our mission and a commitment to maintain areas of study that may not generate large amounts of revenue but are central to that mission.

All college leadership teams will use historical student-faculty ratios as presumptive departmental baselines, and then adjust from those baselines using a combination of additional objective data, including majors, degrees awarded, residency mix, and research expenditures, and consideration of mission and qualitative factors. All college plans should identify any programs that cannot be continued given staffing constraints.

The data the college leadership teams are using to inform instructional staffing plans is provided in conjunction with this plan. It includes:

1. Faculty FTE, by tenure status (5-YR average and 5-YR trend);
2. SCH (5-YR average and 5-YR trend);
3. Majors (5-YR average and 5-YR trend);
4. Degrees Awarded (5-YR average and 5-YR trend);
5. Mix of residents, non-residents, and WUE students;
6. Research expenditures; and
7. National enrollment trends and data.

Again, data alone cannot drive these decisions. Recognizing that, deans and executive leaders commit to assessing programs holistically, using the above metrics as informed by qualitative and mission factors to arrive at final staffing goals. This work is ongoing and will continue over the coming months, leading to proposed plans in early fall 2021.

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