

EDUCATION

The strategic planning committee looked at CALS' teaching, training and learning with an eye toward strategic positioning for our educational mission. An education workgroup was charged with crafting recommendations and identifying specific tasks to be undertaken in the coming academic year. What follows is a summation of key points of the workgroup report.²

A key question in our analysis was, “What makes CALS CALS?” Our college's hallmarks include research-based, hands-on teaching of undergraduates; world-class graduate programs rich in research and project assistantships; and short courses, workshops and other formal and informal programs that forge ties with industry and the public. What makes CALS special is not only that we conduct these activities but that we integrate them into a coherent set of practices that blurs the separation between teaching, research and service and crosses boundaries between disciplines.

Recommendations in Three Key Areas

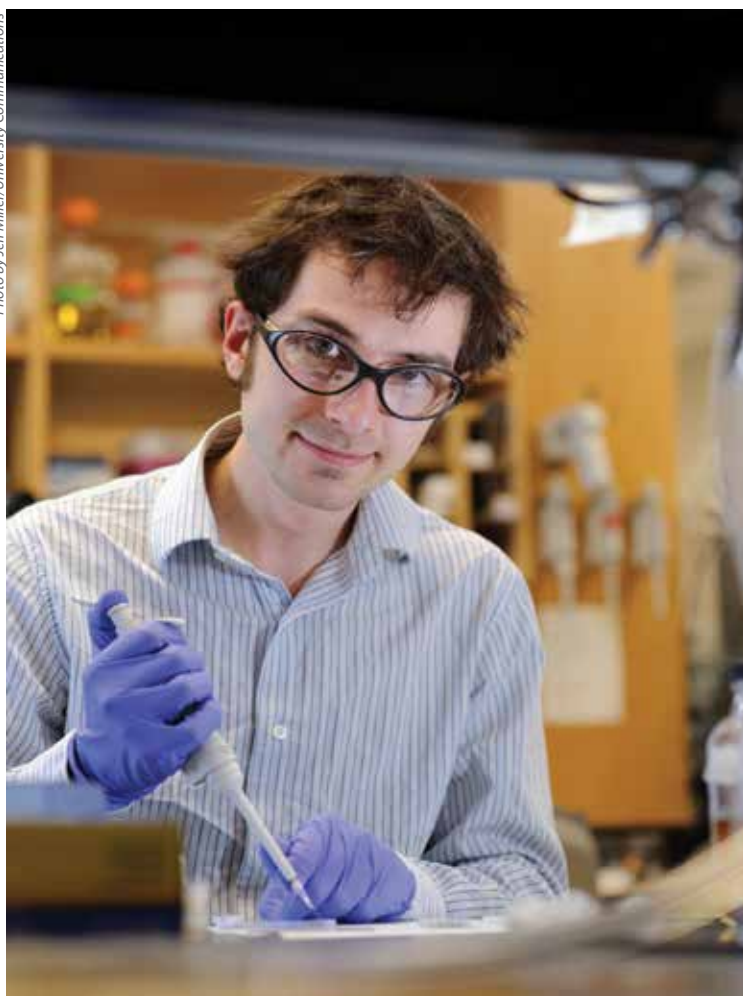
CONTENT (What do we teach and why?)

As scientific disciplines and techniques emerge and change, we must ensure that our educational mission extends beyond disciplinary training and envisions academic structures that move toward a problem-oriented approach. We see three learning goals as particularly pertinent: to educate creative problem solvers, to contribute to workforce development, and to prepare scientifically literate and culturally competent citizens.

DELIVERY (When, where and how do we teach?)

New modes of delivery have the potential to increase our capacity with existing audiences and extend our reach to new audiences. We urge an approach that prioritizes quality and the creative use of our finite resources. These new modes of delivery should ideally be developed in the context of other campus-wide

Photo by Jeff Miller/University Communications



Half of CALS seniors complete research projects with a faculty member outside of course or program requirements before graduation—more than at any other UW–Madison college.

Their work can make a difference. Nate Cira BS'11 (left) contributed a key component of a simple, inexpensive bacteria test that could save newborns from contracting deadly infections—work he did as an undergraduate in the lab of CALS biochemistry professor Douglas Weibel. The team received funding from the Bill & Melinda Gates Foundation to pilot the test in rural Africa.



Photo by Nicole Miller MS'06

Forestry Summer Camp takes CALS undergrads to Kemp Natural Resources Station for three weeks of on-site learning.

Research-based, hands-on teaching of undergraduates is a hallmark of education at CALS. The college will look at introducing and expanding a variety of innovative teaching models in ways that will increase capacity and enhance student learning.

or system-wide initiatives, such as UW–Madison’s Educational Innovation or UW–System’s Flexible Option degrees, and in partnership with Extension and other campus units. We urge the college to think creatively about its role in outreach to public audiences beyond Extension. We must leverage the college’s leadership and expertise in all modes of communication to a large external audience.

CAPACITY (Whom do we teach, and how much?)

As important as content and delivery are to our educational mission and future, we contend that capacity is the area with the most leverage over the other two, since in order to increase capacity (the number and type of students we teach), one essentially has to think about both content and delivery. Capacity also is the area that is most pressing on our attention, given the increase in student enrollment and decrease in faculty.

A key strategy for CALS will be to direct our instructional resources toward activities and policies that will increase our overall instructional capacity while maintaining instructional quality. Exploring opportunities to share CALS expertise with nontraditional students via nontraditional teaching methods may allow for continuing capacity growth and also bring in additional revenue. Specifically, we urge the college leadership to contemplate scenarios that decouple growth or instructional capacity within departmental majors on the one hand, and growth in credit hours provided by the college on the other.

It is conceivable, for instance, that CALS would cap enrollment for some of its majors in order to be able to continue to provide high-quality education, even within shrinking 101 budget environments. This is not incompatible with the idea of departments—regardless of size—providing large service courses in content areas relevant to students across the college and the university. In fact, capacity building in the area of service courses (a) allows the college to strategically invest in structures that will be rewarded by emerging campus-wide budget metrics; and (b) is much more adaptable to highly dynamic budgetary or staffing realities than more formalized structural growth in disciplinary majors. We should look for ways to work across boundaries to join similar class content courses while potentially conserving instructional effort. This will have a positive effect on the student population by showcasing the breadth of the entire university and hence provide a more robust experience.

Recommended Workgroups for 2013–2014

We recommend that three target areas be considered by workgroups—Educational Capacity Metrics, Use of 101-Funded Graduate Assistantships, and Short Course Offerings and Infrastructure.

1. Educational Capacity Metrics

This area concerns how we measure instructional “capacity” across the college; we cannot increase our capacity if we do not have a clear set of current measures and a realistic set of future goals.

Our rapidly growing enrollments require us to reconsider our teaching loads. As campus explores moving toward responsibility-centered management, with budgets driven by instructional contributions, we would be wise to consider what metrics accurately reflect our contributions to the teaching mission of the university. CALS has a reputation on campus for low teaching loads relative to our sister colleges. We need to take this external perception seriously.

We recommend that this working group review existing and available data and select a set of metrics that is both appropriate for the college’s diverse mission and captures the values and principles of the college.

2. Use of 101-Funded Graduate Assistantships—and whether some should be converted to teaching assistantships

We recommend that this working group review the current distribution and use of 101-funded graduate assistantships in the college and offer a plan for the future use of these assistantships.

3. Short Course Offerings and Infrastructure (not limited to FISC)—as an area of potential growth in capacity (and resources) for the college

Some short course offerings (Farm and Industry Short Course, School for Beginning Dairy and Livestock Farmers, Master Cheesemakers, etc.) are well established and recognizable, and many such efforts generate revenue for the units that run them. But the full extent of our efforts to provide focused training related to specific career goals is unclear, as is our potential future capacity. In addition, many of these programs are run independently, that is, there is little coordination of short courses across the college. Are there infrastructure services (distance education capabilities, registration and enrollment systems, billing procedures, etc.) that could support multiple programs?

We recommend that this working group review the current array of short course offerings in the college and recommend future subject offerings and/or infrastructure support that would encourage both efficient use of current resources and generation of future revenue.

2. See the full education workgroup report (Appendix 2) at www.cals.wisc.edu/stratplan.

Photo courtesy of the Department of Food Science



They flock to Babcock: Food science professor Scott Rankin (in lab coat) trains industry professionals from around the country in the art of ice cream making.

Education at CALS is enriched by close partnerships with industry. A key way for learners of all levels of expertise to experience this is through the college’s many short courses, which also can provide significant revenue for the units that run them. The college is exploring the potential for expanding short courses.