



College of Agricultural & Life Sciences  
2009-10 Academic Affairs Visioning Committee

## **REPORT TO INTERIM DEAN IRWIN GOLDMAN**

May 1, 2010

### **The CALS Academic Affairs Visioning Committee**

On November 20, 2009, Interim Dean Irwin Goldman convened the CALS Academic Affairs Visioning Committee with the goal of crafting "a new vision for the structure, organization, and missions of academic affairs within CALS ... [and] to sketch out what our academic affairs enterprise might look like in the future."

Over the past six months the committee engaged in numerous listening sessions and discussions with students, faculty, administrators, alumni, employers and other stakeholders. The goal of these meetings was to gain an in-depth understanding of the challenges and opportunities related to academic affairs in CALS and to develop a set of recommendations to the CALS leadership that will serve as the basis for a PVL for a national search for a CALS Associate Dean for Academic Affairs.

### **The State of Academic Affairs in CALS**

The Office of Undergraduate Programs and Services defines their mission as "providing each student with excellent learning opportunities that promote personal and professional development" (see: <http://www.cals.wisc.edu/students/>).

The committee agrees that the primary audience served by the Office of Undergraduate Programs and Services (UP&S) is students, both within CALS and, as appropriate, in other UW-Madison programs. The mission of this office, therefore, is to support and respond to the educational and instructional needs of the college. The audiences served include undergraduate students, graduate students, short course students, and faculty and staff who serve these populations. Toward that end, the committee examined the current state of academic affairs in CALS with three questions in mind:

- First, what makes CALS CALS? In other words, what are the college's core instructional mission, values, and traditions that should be amplified or at least not compromised in the future?
- Second, what knowledge, skills and aptitudes should the next generation of CALS and UW students graduates gain, and how can CALS create the teaching and learning landscape infrastructure necessary to prepares them well for a rapidly changing world?
- Third, what are the potential challenges related to academic affairs that the college is facing – both immediate and down the road?

## **What makes CALS CALS?**

The committee indentified several areas that define CALS, in both positive and negative ways. These themes consistently emerged in our conversations with students, faculty, employers, alumni, and other stakeholders

The role and value of instruction is variable throughout the college. CALS faculty have appointments formally split between instruction, research or Extension in varying combinations.<sup>1</sup> This is a common practice for most colleges of agriculture and life sciences in major land grant universities. But it also means that CALS faculty at UW-Madison – even within the same department – can have different instructional obligations, which contributes to a culture in which some faculty members see a tension between teaching and research, supported often by the belief that it is generally not possible to run a productive research lab and teach large numbers of students at the same time, even though there are UW-Madison departments that maintain both substantial instructional programs and top-ten research programs. This tension is evident in the college's choice to allocate state-funded graduate assistantships as RAs and the low number of graduate TAs.<sup>2</sup> As a result, CALS has a tradition of faculty teaching courses, rather than employing TAs or academic instructional staff in the classroom, and of offering very few large-enrollment courses.

CALS is marked by a strong culture of independent departments. Currently, all CALS majors, with the exception of Biology, are housed in a single academic department. Under this system, curricular decisions, teaching assignments, many student services and resource allocations for each major are made within the academic department, sometimes at the expense of a holistic view of the student experience within CALS, or the university. Biology, without a chair or traditional department structure, struggles to provide the same student services that in all other cases are departmentally bound, such as faculty advising and scholarship support. Many discussions with stakeholders also revealed an inherent tension between the role envisioned for UP&S by departments who want few connections to or input from CALS, and by units in the college who rely more on central leadership.

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<sup>1</sup> CALS has a total faculty FTE count of 254, which includes 73 instructional FTEs and 120 research FTEs.

<sup>2</sup> The number of TA lines in CALS has increased recently with the addition of 16 half-time TA lines from a successful proposal to the Madison Initiative for Undergraduates (<http://madisoninitiative.wisc.edu/>).

The co-existence of agriculture and the life sciences as foci is unique to CALS, and both areas are central to the land grant mission of the university. At UW-Madison, CALS also has the benefit of being surrounded by outstanding units in engineering, medicine, and the liberal arts – few other land-grants have this combination of disciplines on one campus.

CALS emphasizes the integration of research and teaching, including lab experiences for undergraduate students, internships and other hands-on training. Moreover, CALS considers its undergraduate curricula to have a strong practical and professional orientation – compared to other colleges. This educational approach focuses on preparing students for their post-graduate plans, which may be entering the job market or continuing on to graduate school.

Historically CALS has also prided itself on the nature of its advising, and the heavy reliance on faculty advisors, rather than professional advisors. Many faculty and students see the regular advising visits between advisees and faculty advisors as beneficial for both. Students also consider CALS's smaller size – relative to other colleges at UW – and a more accessible Office of UP&S as an attractive feature, and appreciate CALS's commitment to scholarship support for students at all levels of their undergraduate career.

### **The next generation of CALS students?**

The traditional strengths of the college in agriculture and the life sciences tend to be reinforced at the undergraduate level by the fact that CALS currently only accepts incoming freshmen who have declared a CALS major, and enrollment numbers in CALS have remained fairly stagnant over time. Based on a variety of factors, the committee expects that there are opportunities to increase enrollments that could be advanced if UP&S worked more closely with undergraduate admissions at the campus level to implement some of the recommendations for recruiting and advising students outlined below.

This raises the question of what we expect the next generation of graduating CALS students to look like. Much of the committee's thinking on this topic is already reflected in the Offices of the Dean of Students and the Provost's document on Essential Learning Outcomes (see: [http://www.provost.wisc.edu/content/WI\\_Exp\\_ELOs.pdf](http://www.provost.wisc.edu/content/WI_Exp_ELOs.pdf)). Based on the stakeholder discussions outlined earlier, however, the committee also sees the need to highlight two areas as particularly relevant for CALS's long-term planning related to academic affairs.

The first are high-impact, practical experiences for students, such as international experiences, field-based programs, for-credit and not-for-credit internships, and other professional shadowing opportunities. This builds on the idea that the value of a future UW or CALS degree will – in part – be based on a student's ability to connect specific intellectual or technical skills to the marketplace, as one employer put it. Given the

competitiveness of current employment markets, picking up these practical experiences as part of the UW experience rather than "on the job" is increasingly a necessity, rather than a luxury.

The second area includes skill sets and aptitudes that are critical to providing students with a degree that has long-term value. These include writing and communication skills, leadership experiences, problem-solving and decision-making. Furthermore, they should include intellectual adaptability and flexibility as critical skills for any graduating UW student, especially in a world where new scientific breakthroughs and the emergence of new scientific fields (genomics, nanotechnology, bioenergy, etc.) constantly change our understanding of the world and can quickly make existing knowledge obsolete. Finally, any CALS/UW graduate should be able to respect diverse perspectives and embrace diversity as a prerequisite for understanding, creativity and innovation in an increasingly culturally diverse working environment.

### **Challenges for academic affairs in CALS and beyond**

With these considerations about learning outcomes in mind, the committee identified at least two broad challenges for CALS's long-term planning related to academic affairs.

The first area is external challenges. UW students will – over the course of their lifetime – be asked to solve increasingly complex societal and technical problems, many of which will not have disciplinary specific answers. Discussions about the future of food or about sustainable energy solutions are just two examples of the types of questions that we will face in the future and that will require solutions that cross disciplinary boundaries. This raises two questions:

- How can we prepare students for these challenges and for jobs that – in many cases – do not exist yet?
- How can we capitalize on the strengths of existing disciplines and departments and – at the same time – maintain academic programs that are adaptive and prepare students for a constantly changing world? Is there an opportunity, for instance, to rethink the Capstone experience in CALS with this challenge in mind?

These questions tie in to a second set of at least three internal structural challenges within CALS and UW:

- CALS departmentally-bounded curriculum can restrict option for students seeking greater interdisciplinarity and flexibility, and provide real challenges in providing faculty advising relevant to students. The previous degree-structure in CALS, for instance, did not allow a political science student (housed in the College of Letters & Science), to complete a second major in food science (i.e., CALS). The committee anticipates that the new CALS B.S. degree structure will provide students with more flexibility and that UP&S will provide leadership in envisioning how programs and students might best make use of this curricular flexibility.

- A second structural challenge arises from the fact that – by many metrics – CALS teaches below capacity, relative to other colleges in the university. For instance, CALS enrolled 9.3 undergraduates per faculty FTE in fall 2009, as compared to 14.2 for UW overall. CALS also taught 3.46 group instruction sections per state-funded instructional faculty FTE in fall 2009, compared to an average of 1.92 in L&S.<sup>3</sup> The committee understands that smaller class sizes and more frequent face-to-face contact with faculty can correlate positively with measures of learning outcomes and student satisfaction (for UW-Madison-specific indicators of satisfaction, see results from the National Survey of Student Engagement: [http://www.apa.wisc.edu/Surveys/NSSE\\_2008\\_school\\_college\\_final.pdf](http://www.apa.wisc.edu/Surveys/NSSE_2008_school_college_final.pdf)), but also sees an immediate need for CALS to contribute more equitably to the undergraduate teaching mission of the university.
- A final structural challenge in CALS relates to cross-college programs. While the agriculture and life sciences focus of the college attracts many students into departmental majors, including Biochemistry, Genetics, and Nutritional Science as the three biggest ones, the single biggest major in CALS in terms of enrollment is currently the Biology major. Interestingly, many of the core strengths of CALS in terms of departmental autonomy in academic affairs and faculty-based advising also pose challenges for students in this major, given that Biology as the biggest CALS major does not have a departmental home and therefore may be seen by some as less central to the college. Challenges related to the nature of the Biology major in CALS include the lack of Biology major-specific scholarships, the potential lack of fit between departmental faculty advisors and (frequently) pre-med biology students, and the lack of Biology major-specific career counseling and alumni relations.

## Committee Recommendations

Based on these considerations, the committee puts forth a set of recommendations made with the understanding that university students are a constantly changing population, and it is important that we build a structure that includes regular evaluation of both their changing needs, and the college's ability to meet those needs.

### *Leadership and Management*

The committee concludes that at this time, it's appropriate for the role of Associate Dean of Academic Affairs and the Office of UP&S to evolve into one of leadership, management and oversight with respect to academic directions and program quality, office staff, budget and resource decisions. The significant day-to-day advising responsibilities should be removed from this role to allow the associate dean the scope to advance the broader educational mission of CALS. This leadership and management role should include:

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<sup>3</sup> These numbers are not directly comparable, given the differences across colleges in how instructional and research appointments are assigned. If state-funded research appointments in CALS are added into overall faculty FTEs to make them more comparable with other colleges, CALS teaches about 1.8 group instruction sections per FTE, based on fall 2009 numbers.

- A commitment to an ongoing evaluation of the college's needs related to academic affairs and the services and effectiveness of the Office of UP&S. Such an evaluation should align with campus and college evaluations of any other programs or administrative unit. The committee also encourages the college to consider creating a faculty/staff advisory board for student services and academic affairs in CALS (independent of the CALS Curriculum Committee), which could be modeled after advisory boards currently used very effectively in other UW colleges, such as L&S. It might be limited to faculty, or the membership could be construed more widely to include staff and other stakeholders.
- As with any other changes, additional staff and new programs will require additional resources. This could include staff dedicated to seeking new resources through grants and other competitive sources. It may also require the college to end some programs in order to redirect those resources in new and more relevant ways, based on the committee's recommendations. Or substantial increases in enrollments, along with some changes in budgeting, might put CALS in the position to garner additional state funding. The committee also recommends that the college evaluate their administrative operations and staffing, particularly as they relate to improving efficiency for the office of UP&S.
- The committee also expects UP&S to provide leadership for implementing teaching and learning technologies, particularly given the constantly changing landscape in this area and the critical importance of new information technologies for reaching students online and offline. Under the current structure, all IT services, including those for teaching and learning, are housed at the academic department level. This structure yields an inconsistent set of services for both faculty and students, as well as likely unnecessary duplication of both human and technical resources across the 19 academic departments. We recommend that the office take an active role, integrating with DoIT, other campus-wide efforts and college-level IT personnel, to coordinate investments with CALS academic departments to maximize the services available to instructors and students.
- The committee envisions a strong leadership role for UP&S in connecting CALS-specific academic programming with related efforts in the college or on campus. This role for UP&S as a liaison will be particularly important as the new B.S. degree structure is phased in, and includes:
  - Establishing connections between CALS first year experiences and other equivalent programs on campus
  - Playing a leadership role in implementing the forthcoming recommendations of the Farm & Industry Short Courses (FISC) task force, and exploring potential opportunities for connecting with other departments and units on professional programs related to (and going beyond) FISC
  - In connection with the Graduate School, explore the potential integration of the current CALS Office of Grad Studies into the larger UP&S structure. At the very least, UP&S should provide a support structure for graduate

students (and also post-doctoral researchers and trainees) related to student life issues.

- The committee also recommends that UP&S needs to improve communication with prospective and current students and parents. This relates to the UP&S web presence and other forms of direct communication, but also to a potential leadership role of UP&S in the coordination of messages and marketing tools with departments. Most importantly, the committee sees a need for UP&S to spearhead efforts to provide the college with a coherent and contemporary image, identity and brand related to academic programs, particularly in the area of undergraduate recruitment, and to coordinate those efforts with Undergraduate Admissions.
- Finally, the committee felt that that its charge did not include specific recommendations regarding the role or prominence of CALS as part of the Biology major. The committee did, however, identify the challenges surrounding advising, scholarship and student support for the Biology major in CALS outlined earlier as urgent ones, and envisions a crucial role for UP&S in addressing these issues in the short term.

### *Curricular Flexibility*

Taking full advantage of the new B.S. degree structure, the committee recommends that UP&S will take a leadership role in creating a system of greater curricular flexibility for students. This includes:

- CALS should provide for undecided/undeclared undergraduates. In particular, we urge UP&S to design and implement a system that allows undecided undergraduates to select into CALS while they are making up their mind about a specific major. This will remove a barrier of access that currently artificially caps enrollment in CALS. More importantly, the committee is not convinced that most of the arguments that have been made in the past recognizing faculty-advising as the limiting factor that prevents us from allowing undecided students to be housed in CALS are (still) valid:
  - First, some have argued that many of the affected students are undeclared rather than undecided and are simply waiting to be admitted to competitive majors in other colleges. The committee's discussions with students and administrations have showed that this is not true, and the vast majority of undecided students have a sense of the general direction they want to go in (e.g., science vs. social science), but not necessarily about their specific major (e.g., Community and Environmental Sociology vs. Life Sciences Communication).
  - Second, the complexity and expansive nature of the previous CALS college requirements made it very difficult for students to transfer into the college or to "try out" different paths before formally declaring a major. The new B.S. degree structure offers students much more flexibility and is therefore directly in line with the patterns of decision making we are seeing from undergraduates in other colleges at UW-Madison.

- Toward that end, the committee also recommends that CALS will actively support and develop interdisciplinary curricular offerings. In response to increasing student demand for interdisciplinary programs, CALS should consider working across department boundaries to offer cross-department capstone or honors experiences, cross-department majors, and better utilize existing certificates on campus in order to meet students' needs. One example of this is the need for CALS UP&S to coordinate and collaborate with the Institute for Cross-College Biology Education (ICBE) for the Biology major.

### *Student Services*

The committee *also recommends* that UP&S play an expanded leadership role in a number of areas related to student services.

- The first area relates to maintaining and expanding financial support for students. CALS current and past commitment to providing student scholarships is seen by many stakeholders as a hallmark of the college, but with resident tuition increasing by nearly 120% in the past ten years; the need will easily outpace CALS's ability to provide assistance. In addition, the committee recognizes the opportunity cost to students for each experiential learning opportunity they participate in, from an internship in a lab or in industry to study abroad experiences; their ability to work for pay is further diminished. Since the committee sees great value in these types of out-of-classroom experiences, we recommend the college strengthen its commitment to providing financial assistance to CALS student and consider creative solutions to these increasing pressures.
- A second recommendation relates to strengthening ties between alumni programs and instructional services. The committee suggests that the college increase connections between college-level alumni relations programs and related efforts in the college's academic programs in order to fully leverage alumni affinity for internships, career fairs, job placement and other experiences. UP&S should provide leadership that is based on each department's particular needs and preferences, but at the very least involves a pulse-taking and coordinating role across all units.
- Finally, the committee recommends that the college shift some of the advising to professional advisors in order to serve specific populations of students, including undeclared students and those with primary majors outside of CALS. Some of the resources for this could become available by sharing efforts and activities currently housed in UP&S (e.g., recruiting, visiting days, etc.) with other units on campus. Under the auspices of UP&S, these professional advisors should also connect with campus-wide efforts to streamline and revise cross-college advising.

## *Instructional Support*

Finally, the committee proposes that UP&S spearhead all college efforts in providing and improving instructional support.

- This includes the potential for a shift of teaching responsibilities toward instructional staff. The staff to faculty FTE ratio in CALS in fall 2009 was 0.12. In L&S it was 0.36. Such a shift would potentially require a much more central role for UP&S than it currently has in negotiating the allocation of instructional resources among departments. The committee recognizes that any effort in this area would require strategic planning to transition away from a model in CALS (including short courses) that has traditionally focused on faculty-based teaching.
- The committee also proposes that UP&S spearhead and centralize efforts to educate faculty and staff on opportunities for professional development and other curricular activities. This type of leadership will enhance current programs such as biology education, internationalization of the curriculum, leadership programs and other out-of-classroom learning, as well as allow CALS to dynamically respond to long-term developments and opportunities. The committee also encourages UP&S to provide support and process training to faculty interested in creating certificate programs for interdisciplinary education and to participate in existing efforts on campus.
- Finally, the college should consider converting some proportion of current 101 funded research assistants to TA lines in order to increase teaching capacity, especially in large service classes. The committee concludes that this issue warrants a more careful discussion, and urges UP&S to play a leadership role in developing a concrete plan for working with departments and the CALS leadership on the possibility of a conversion under specific circumstances.

Respectfully submitted:

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