THE UNIVERSITY OF ARIZONA

College of Agriculture
and Life Sciences

RECOMMENDATIONS

Faculty Consultative Group (FCG) on

CALS Effectiveness, Efficiency and Innovation

May 21, 2012

INTRODUCTION

The Faculty Consultative Group (FCG) has been tasked to formulate recommendations on how we can more efficiently manage and utilize resources to achieve greater effectiveness in carrying out our three-fold mission of teaching, research and extension.

Dean Shane Burgess provided the following to the FCG:

Charge: To identify how we could change our operations to be even better in state-funded academic and non-academic functions, by seeking out, evaluating and providing creative ideas focused on:

• *Effectiveness* – enhancements to better meet our three-fold mission of teaching, research and extension.

• *Efficiency* – enhancements to better organize, manage and utilize our resources and to cost less than our current systems.

• *Innovation* –truly new ways to do things compared to our past.

Resources: Open access to all information/people needed except for personal (or otherwise legally secure) data and spirit of co-operation within the college.

Guiding Principles:

- Includes any aspects funded by our State Permanent Budget only (i.e. state money that supports academic programs and support services, where revenues are derived mainly from state appropriations and student tuition and fees).
- Could include restructuring, programmatic changes.
- Use resources that may have been created in the past if so wished (e.g., during the "transformation" process).
- Is not to include additional costs; must work inside our existing budget and the costs for changes must come from savings in other areas.
- This is not a vendetta process.
- There is not to be a culture of quid pro quo.
- Expect the consultative group to get broad input.
- Service is voluntary.
- Regular updates will be provided to the Dean with the final report by June 1, 2012.

The members of the Faculty Consultative Group are listed below and represent a balanced cross-section of the various disciplines within CALS in accord with the criteria for balanced representation employed in the CALS Post Tenure Review Committee.

Joel Cuello, Co-Chair, Professor, Department of Agricultural and Biosystems Engineering

Wanda Howell, Co-Chair, Professor, Department of Nutritional Sciences

Roger Dahlgran, Associate Professor, Department of Agricultural and Resource Economics

D. Phillip Guertin, Professor, School of Natural Resources and the Environment

Sabrina Helm, Associate Professor, Norton School of Family and Consumer Sciences

James Knight, Professor, Department of Agricultural Education

Brian Larkins, Professor, School of Plant Sciences

Sean Limesand, Associate Professor, Department of Animal Sciences

Edward Martin, Professor/Specialist, Department of Agricultural and Biosystems Engineering

Daniel McDonald, Area Associate Agent, Pima County Cooperative Extension

Sandy Pottinger, Associate Dean, CALS Administrative Services, *ex officio*

The following recommendations are listed in no particular order or ranking of importance.

List of Recommendations

Education

1. Development of 2+2 programs with community colleges
2. Designing curricula to meet desired skills sets by industry and other stakeholders
3. Center for Agricultural Education and Leadership
4. Develop cooperation with China and other countries to diversify and enlarge student base
5. Online courses and certification programs (infrastructures and support) for increased enrollments
6. Reducing the amount of overlap between programs (e.g., water programs) should be considered where possible
7. Leverage high-ability and committed teachers for teaching
8. Strengthening two-way relationships between CALS and industry and other stakeholders
9. Improve efficiency of student advising without sacrificing quality

Research

10. Experiment Station Efficiency
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14. Metrics
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16. Strengthen two-way relationships between CALS Extension Programs and commodity groups, companies and other stakeholders
17. Renegotiate IDC returns for off-campus locations
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23. Efficiency of faculty hiring and retention
24. Total Value System for Faculty Contributions

FCG Recommendation 1

Division: General/**Education**/Research/Extension/Business

Category: 2+2 programs with community colleges

Recommendation:

Develop 2+2 programs with community colleges

Rationale:

This sends a message that CALS is interested in and willing to work with others that are also involved in similar work; it may increase our student numbers.

Procedure:

1. The development of new programs needs to be aligned with the existing educational profile of the department. Substitution of established programs by a new 2+2 option also needs to be considered.
2. Need to address potential concerns that a reduced time on campus might lead to loss in quality of education.
3. As CALS, we need to determine what our mission and positioning is in higher education and what value proposition we aim to make regarding education provided in cooperation with other educational institutions (only local community colleges?). We also need to define our role as leader in such cooperation and critically analyze possible reputational effects.
4. The goal of 2+2 programs needs to be clearly articulated: do we primarily aim at increasing the number of graduates or do we focus on the quality of the learning experience (and, potentially, employability) of our graduates? Or both? In the latter case, we will clearly need to reevaluate and increase our resource base.
5. We need to identify the cost/revenue-implications for each department (incl. development of metrics for 2+2 engagement).
6. We need to determine which function (on CALS level or departmental level) is responsible to explore cooperation opportunities with other educational institutions and define procedural guidelines regarding the establishment of cooperation. It would be helpful to benchmark with departments within CALS/UA that already offer 2+2 degrees and survey students/graduates of 2+2 degree programs regarding their experience/perceived advantage in employability.

Implications:

Collaborating with Community Colleges in an open and collegial manner will naturally open the doors to better relationships and the potential for more students transferring to the UA and CALS.

FCG Recommendation 2

Division: General/**Education**/Research/Extension/Business

Category: Curriculum development based on industry standards

Recommendation:

Design curricula to meet desired skills sets by industry and other stakeholders

Rationale:

This is all about ensuring that CALS is relevant and being responsive to dynamic changes that have and will continue to occur in the industries for which CALS exists. Our main "product" as a university is our graduates and we have the responsibility to ensure that we prepare them for a successful career by closely monitoring employers' needs and assessing graduates' employability.

Procedure:

1. Each department should conduct a needs assessment taking into account the requirements of the job markets their graduates will enter. This implies to first determine who employers are; what their needs are regarding high-potential job applicants; and how our current programs are meeting these needs. We then need to develop standards to measure our programs' effectiveness in preparing students for careers in the industries; measure placement success; adapt our programs to meet dynamic labor market needs.
2. Develop an "exit" strategy for programs that are no longer viable in terms of providing employable graduates.
3. Each department should engage an advisory committee to provide direction for the process and needs to monitor whether the necessary "soft skills" which are relevant for survival in today's job environment are being covered in the curriculum (e.g., communication/presentation skills, collaborative work skills, language skills).
4. Departments can also consider (joint) career fairs to connect students with potential employers.
5. It is to be determined whether each department should monitor the employability of their graduates and also keep track of their professional career or whether a centralized function on CALS level is a more efficient option to a) ensure that our educational programs meet the needs of today's and tomorrow's labor market and b) to enable us to track former students for the benefit of UA/CALS.
6. Closely collaborate with UA Alumni Affairs.

Implications:

Through this process of making the curriculum responsive to industry needs, additional resources and support will likely develop.

FCG Recommendation 3

Division: General/**Education**/Research/Extension/Business

Category: Center for Agricultural Education and Leadership

Recommendation:

Reconfigure the Department of Agricultural Education to the Center for Agricultural Education and Leadership in the Office of Academic Programs

Rationale:

Many of the services provided by the current Department of Agricultural Education are limited to departmental audiences, when, in fact, they could be of value to the broader CALS community. These services include leadership and communication workshops and short courses, in addition to preparatory courses on instructional techniques, curriculum development, and evaluating teaching and learning effectiveness.

Procedure:

1. This reorganization proposal should be considered in light of accreditation requirements for the teacher certification programs.
2. Maintenance of the teacher certification program is essential and University or ABOR policies must be considered that relate to the type of units approved for degree-granting status.
3. CALS should take advantage of the potential opportunity for more students, staff and faculty to have access to the learning/training opportunities offered by the Agricultural Education faculty.
4. This represents an underutilized resource with implications for improving leadership, communications, and teaching delivery and assessment skills across CALS.

Implications:

Improving leadership, communications, teaching, and assessment skills can have a direct influence in promoting the quality of the student, faculty and staff experience. Positive outcomes would be that faculty and staff improve job performance and satisfaction; and students improve skills vital to career development.

FCG Recommendation 4

Division: General/**Education**/Research/Extension/Business

Category: International Cooperation

Recommendation:

Develop cooperation with China and other countries to diversify and enlarge student base

Rationale:

Educational cooperation with China and other countries would seem to help us capitalize on existing strengths in the College. Because of the global nature of the industries that are serviced by CALS, there appear to be opportunities even in tough economic times to connect internationally. The strict regulations imposed by the Department of Homeland Security have restricted the influx of international students, making it even more important for us to be competitive in acquiring the best.

Procedure:

1. Some countries' initiative in sending their students abroad to make their home economy stronger by improving the workforce's education should be monitored closely (e.g., Brazil).
2. Cooperate with UA International Affairs and other units on campus who focus successfully on collaborating with international partners and recruiting students.
3. Re-evaluate what needs international students have in better performing at UA (e.g., language programs, scientific writing).
4. Consider what an increasingly international student body means to UA culture and campus life; whether we aim to attract undergraduate or graduate students; what current international students' experiences and unmet expectations are; how we can become more competitive in getting the high-potential applicants; finally, what cost would be associated with attracting and keeping international students (who might want to stay in the US or go back home, possibly leading to a "brain drain").
5. Analyze the budget implications of a) marketing our programs internationally; b) an increased international student body (including implications for UA administration, such as processing of Visas).
6. Determine how an increased international student body can be served optimally while other recommendations such as increased offer of online-courses or 2+2 degree programs are put in effect.

<u>Implications:</u>

By thinking broader rather than more narrowly, the potential to attract and connect with students from other countries offers another source of students and revenue that are consistently in line with the vision and mission of the UA and CALS.

FCG Recommendation 5

Division: General/**Education**/Research/Extension/Business

Category: Online courses and certification programs (infrastructures and support) for increased enrollments

Recommendation:

Offer online courses and certification programs (infrastructures and support) and use other non-traditional approaches such as workshops, special courses and training that address industry/stakeholder needs.

Rationale:

It seems that the world is responding to nontraditional methods for delivery of instruction and the more responsive we can be as an institution to those needs, the more relevant and viable we will be. By offering certificate programs and other non-traditional offerings such as workshops, special courses and training that address industry and other stakeholders' needs, CALS can be more nimble and responsive to such opportunities and even create new opportunities. Finally, online-courses/non-traditional courses are also a means for substantial revenue creation.

Procedure:

1. Additional engagement in this arena requires us to articulate what our competitive advantage is and what value proposition we aim to make regarding education provided by UA online and offline.
2. We need to identify (additional) courses for each department that could be taught online.
3. For each department, an increase in online teaching not only offers an additional source of revenue generation, but also increased cost. It's a risky investment we need to encounter with an entrepreneurial mind which is geared at increasing return of investment but also takes into account associated risk. We need to identify the cost/revenue-implications for each department (incl. development of metrics for online-engagement). For departments, there needs to be certainty regarding how profits from online-engagement will be redistributed to the department; the current redistribution mechanism may need to be reconsidered to better incentivize departments/faculty to get involved in online-/non-traditional teaching.
4. We need to be cognizant that teaching in an online environment requires additional/different resources; opens up additional market segments but also creates additional/new competition (e.g., University of Phoenix) both of which requires an evolved perspective on our competitive advantage, our marketing strategy and

communication spending; it may also create a "cannibalization effect" regarding existing courses/programs which may be substituted by online offerings.

5. We need to address effects on the tuition base (e.g., what would this mean for the ratio of out-of-state/in-state tuition); what budget shifts would be created by increased involvement in online education; how our student-base might be affected/changed when a larger portion of courses is taught online.

6. Finally, we need to efficiently control the quality of our online offerings and invest in new teaching technologies and continue to offer faculty help in creating and delivering online classes at a competitive standard.

Implications:

The place bound nature of many (potential) students offers some exciting and interesting opportunities for the College to increase our reach and create additional revenues.

FCG Recommendation 6

Division: General/**Education**/Research/Extension/Business

Category: Program Overlaps

Recommendation:

Reducing the amount of overlap between programs (e.g., water programs) should be considered where possible

Rationale:

This effort holds the potential to reduce redundancy and make our system more efficient.

Procedure:

1. Look within CALS and across the University to perhaps leverage our and other's efforts for the benefit of all involved.
2. Identify overlap between programs and courses. This could be done by a centralized function based on syllabi.
3. Initial identification of overlap does not indicate whether a class is superfluous or existential for a program due to limited access of students to other departments' or colleges' classes.
4. A parallel step would therefore entail the development of criteria by which to establish redundancy of a class/course segments.
5. In a next step, the involved departments (and instructors) need to provide input to determine what causes for redundancy might exist.
6. As reduction of overlaps might imply larger class sizes, the resource implications also need to be considered as well as potential quality implications.

Implications:

Costly resources and faculty time can be used more efficiently.

FCG Recommendation 7

Division: General/**Education**/Research/Extension/Business

Category: Staffing the Teaching Enterprise

Recommendation:

Leverage high ability and committed teachers for teaching

Rationale:

There is likely some efficiency that can be gained by considering who should be teaching courses – professors, adjuncts, lecturers, instructors.

Procedure:

1. Evaluate the current instructor profile for each department's undergraduate programs according to the different positions and discuss which courses should be taught by tenured/tenure-track faculty and which are open for other instructor types without compromising the sustainability or quality of the program.
2. Allow great researchers who are not so committed to teaching to teach less and allow great teachers to teach more without sacrificing quality and without negatively impacting the promotion and tenure process for those involved.
3. Carefully consider the substitution of tenured faculty by "master teachers" or adjunct instructors.
4. Traditionally non-tenure eligible faculty do not teach graduate students. This might imply that tenure track/tenured faculty need to exclusively teach on the graduate level, while the non-tenure eligible instructors teach the undergraduate program. This might adversely affect the quality of the undergraduate program as well as result in a lack of cohesiveness among faculty.
5. Consider the implications for the remaining tenured/tenure-track faculty in terms of retention. There might be a "critical mass" of tenure-track faculty necessary to keep an undergraduate program alive in the long run and/or to contribute to the standing of a research university.
6. Carefully consider overall revenue implications: A reduced faculty body may negatively impact research output/grant funding. For some departments, specifically those with small undergraduate student numbers, this might create additional overall budget constraints.

<u>Implications:</u>

Making choices like this may affect the overall reputation of CALS negatively as a research university. However, it could also have the opposite effect as well in terms of the some constituents and free monetary resources.

FCG Recommendation 8

Division: General/**Education**/Research/Extension/Business

Category: Stakeholder Connections

Recommendation:

Strengthening two-way relationships between CALS and industry and other stakeholders

Rationale:

This demonstrates willingness on the part of CALS to listen, learn and engage in utilizing existing expertise to enhance our responsiveness to the needs of our constituents.

Procedure:

1. In this regard, each department needs to define existing and new potentially beneficial stakeholder relationships. In some departments, the expectations regarding CALS offerings and attractiveness for industry partners might still be unclear while others regularly employ outside stakeholders' expertise and resources to provide better research and teaching opportunities.
2. We should benchmark current practices according to internal and external benchmark partners to increase our opportunities to profit from partner resources.
3. The creation of advisory boards including industry/stakeholders might be beneficial for some departments to ensure that degree programs are in line with employer needs and expectations.
4. Potential donors/sponsors can be identified and engaged.
5. Requires alignment with UA Alumni Affairs and UA Development (for donor relations).

Implications:

This might encompass sponsored activities for students, internships, sponsored courses, guest speakers, career fairs, endowed faculty or lecturer positions, donations for technology, building space, etc.

FCG Recommendation 9

Division: General/**Education**/Research/Extension/Business

Category: Student Advising

Recommendation:

Improve efficiency of student advising without sacrificing quality

Rationale:

The advising efforts in CALS are historically strong and are regarded as student friendly. Care should be taken to make sure that whatever changes are adopted, that being responsive to the students and their needs must still be highly valued.

Procedure:

1. Develop metrics for the continuous improvement of our advising teams. This will enable us to better gauge whether centralized or decentralized advising units are more effective and efficient while taking into account the different advising needs of the students in different programs.
2. Consider options to potentially free faculty resources to invest in areas where their engagement is more efficient. (Such as utilizing a staff person for the routine and bulk advising but involve faculty with career counseling, etc.)
3. Ensure that student advising has as one of its goals the increase of employability of students; this aligns with the recommendation on "Curriculum development based on industry standards": we need to ascertain that students are optimally prepared for their careers.
4. This might also require a "shift in mission" for advising from "successfully leading students to graduation" to "successfully leading students to a professional career".

Implications:

By using some method like this, faculty can be more efficient with their time while still being able to get to know the students pursuing their discipline. Advising will become an important part of enabling graduates' employability.

FCG Recommendation 10

Division: General/Education/**Research**/Extension/Business

Category: **Experiment Station Efficiency**

Recommendation:

The committee recommends that the Experiment Stations directed by CALS be reviewed for efficiency and return on investment.

Rationale:

The five Experiment Stations provide a unique resource to the University of Arizona, and help it fulfill the land grant mission to discover new knowledge through research and translate these findings to economic growth or better health. The diversity and uniqueness of each experiment station make comparisons difficult for outsiders. We expect that a station's efficiency will have value in both research and education, and measures will include funding, political standing, and stakeholder recognition. However, if a station, or a constituent branch of a given station, is being underutilized, the resources may need to be redistributed and activities consolidated.

Procedure:

The FCG needs time in future to review Experiment Station productivity.

Implications:

Identify the value of each of the Experiment Stations and their contribution to the CALS mission. The process may reveal areas of underutilization or areas that can be consolidated.

FCG Recommendation 11

Division: General/Education/**Research**/Extension/Business

Category: **Income-Generating Research Activities**

Recommendation:
Increase revenue through income-generating research activities such as laboratory services or development of intellectual property.

Rationale:
CALS has many unique research systems that could provide opportunities to business partners. We should identify these opportunities and organize a business structure to capitalize on our facilities and ingenuity.

Procedure:
Corporate collaborations in the form of research or service contracts exist in the college. We should harness the knowledge and understanding from individuals working with companies and use this to define new interactions in the community.

The Arizona Science Foundation used to provide funding for university-company collaborations. Perhaps other opportunities like this exist but are underutilized in our college.

FCG Recommendation 12

Division: General/Education/**Research**/Extension/Business

Category: Proposal Routing

Recommendation:

Improve the proposal development, review and routing process.

Rationale:

The review time for proposals has increased for both the CALS business office and Sponsored Projects office (SP). Instances have occurred where faculty have not submitted proposals because they cannot complete their proposals for CALS and Sponsored Projects review in time to meet the submittal date. Increasingly CALS is being viewed by faculty as a bureaucratic hurdle, more than a help, in the proposal routing process.

Procedure:

Create a working group between faculty, department business office, and the CALS business office to identify problems and formulate solutions.

Implications:

Improve the working environment. Faculty are frustrated, but the CALS business office does not understand why. Openly discussing the issue will illuminate misunderstandings, as well as identify actually problems.

FCG Recommendation 13

Division: General/Education/**Research**/Extension/Business

Category: Increase Research Income

Recommendation:

Develop a framework that supports collaboration and grantsmanship within CALS.

Rationale:

The only way to enhance IDC revenue is to increase the number or size of grants optioned by CALS faculty and staff. Individual researchers can only do so much. If CALS created a framework to assist the faculty in grant writing, create collaborations, search for funding opportunities and take leadership in developing large grants. Many of our peer institutions have programs already in place to address these issues. Another issue is that some of the materials CALS has available come from different sources and there currently is not one central location for grant support information.

Procedure:

Potential activities include:

1. Expand Web materials related to grants and grant writing (e.g. University of Minnesota).   Put all the information in one location, such as a web page under Research on the CALS website.

2. Hire a grant writer to assist investigators to develop proposals. Assistance with budget entry and proposal editing would promote efficient use of faculty time in the process.

3. Create an Office of Research (OR) to support/direct the above activities.

4. Hire a director for the OR who would be responsible for creating collaborations and managing large proposals (e.g. Kanas State University).

Implications:

Foster collaboration between research and extension on grant development.

Increase in Indirect Cost Recovery

FCG Recommendation 14

Division: General/Education/Research/**Extension**/Business

Category: **Metrics**

Title: Identifying Metrics for UACE Effectiveness

Recommendation:

This proposal recommends that Arizona Cooperative Extension identify metrics that can be used to realign certain programmatic and administrative aspects of the county Extension system with funding realities, and develop a system for data collection related to those metrics.

Rationale:

The Faculty Consultative Group was, in part, charged with answering the questions:
Are we delivering, and to what degree are we delivering, on our College mission though Extension? Do our Extension activities meet the needs of our "mission industries" and other mission constituents? How do we go about delivering, and how well are we delivering, on our college mission through Extension? To answer those questions the FCG identified metrics to help demonstrate the effectiveness of state programs and county offices within Arizona Extension.

Procedure:
Extension faculty were asked to rank the degree of importance in determining effectiveness and efficiency of Extension based on certain metrics such as Grants/Contracts, Number of Volunteers, number of Face-to-Face Contacts, and so forth. Forty two Extension faculty responded to the Internet survey. The Extension sub-committee of the FCG determined that responses ranked as "strong" by 60% or more of respondents would meet the threshold of being an "important" metric for determining effectiveness and efficiency of Extension.

Implications:
Data are not collected consistently across counties or programs.

Diversity of programs makes it difficult to determine the most appropriate metrics.

Responses by agents and specialists differed in some areas.

FCG Recommendation 15

Division: General/Education/Research/**Extension**/Business

Category: **Academic Activity Incentive Program**

Recommendation:

Proposes the use of funds procured as salary savings in a grant to be used for a one time, once per year, salary incentive payment to incentivize faculty to obtain extramural funding and seek funding that helps compensate the University for the portion of their salary dedicated to the academic activity.

Rationale:

In order to better serve our clientele, it is imperative that our faculty garnish external support for their programs and projects.   The purpose of Activity Incentive Program (AAIP) is to encourage faculty to seek salary support, when appropriate, from external sponsors to enhance their programmatic impacts and academic activities.

Procedure:

A. Any faculty member will have access to up to forty-five percent (45%) of state funds recovered in association with his/her role as lead PI and/or lead Co-PI in an externally funded academic activity used toward a salary enhancement. The amount that may be allocated as a salary enhancement may not exceed ten percent (10%) of the faculty member's base salary (hard funded regardless of source).

NOTE: The receipt of incentive salary does not alter the base or salary of a faculty member.

B. Because a minimum of forty-five percent (45%) of incentive income each year is available to specific PI and Co-PI faculty for salary enhancement limited to 10% of base salary, the remaining fifty-five percent (55%) may be used to otherwise foster academic activity. These activities include support of travel, operational support, equipment, etc.

C. Incentive allocations will be distributed once each year and will be based upon funds generated from the current year's grant activities.   Neither academic incentive nor lack of it will affect the regular base salary figure. The funds will be distributed at the end of Fall semester during the academic year and will represent the funds released for that fiscal year.

D. For a project involving UA faculty but originating in another college or school, recovered funds for faculty lead PI/Co-PI will be available and distributed per this policy. It is the faculty member's responsibility to make arrangements for this to occur, in advance of the salary funding distribution change.

Implications:

Incentivize faculty to appropriately request salary savings when developing a proposal. Although this is a practice most faculty should be doing, they often do not due to lack of understanding (what the purpose of salary savings) or the willingness to forego salary support to increase requests for grant support of operations and other aspects deemed more important by the PIs.

This program will allow the College to reward those faculty who have excelled in garnishing grant dollars without actually having to add to the College permanent budget.

This program may inadvertently give preferential treatment to faculty who have access to large granting pools (NSF, NIFA, DOD, etc.).

FCG Recommendation 16

Division: General/Education/Research/**Extension**/Business

Category: **Strengthen two-way relationships between CALS Extension Programs and commodity groups, companies and other stakeholders**

Recommendation:

Exploit our relationships, in many cases, long term relationships with various clientele to help secure increased funding for CALS Extension programs

Rationale:

While Extension programs are geared toward improving people's lives and communities, in many cases there are industries, commodity groups and other stakeholders that also directly benefit from these programs. The most obvious are the agricultural commodity groups such as cotton, wheat, leafy greens, etc. These commodity groups already support CALS faculty through grants. However, the FCG believes there are other modes of support that could be explored. There are also, we believe, other stakeholders that could be identified.

Procedure:

The Dean has already begun the procedure by requesting a report of *Industries and their value* in his April 25th email. The FCG supports this effort but believes that a more in-depth analysis may be required. Perhaps once the results of this initial survey are completed, it could be used to help identify those industries and others that could be approach to seek additional support.

Implications:

Would help identify new funding sources for Extension programs.

We need to be aware of how these clientele currently support CALS and assure we make reasonable requests for additional support.

FCG Recommendation 17

Division: General/Education/Research/**Extension**/Business

Category: **Renegotiate IDC returns for off-campus locations**

Recommendation:

Renegotiate the split between the University, College and off campus sites.

Rationale:

Currently, the University takes 75% of all IDCs procured through grants. The remaining 25% is returned to the College. Of that 25%, 40% is returned to the unit. The problem is with the portion the University retains, which they claim is used for more than simply grant support but for brick and mortar, and utilities. However, for most of our remote locales, the University has no stake in either the buildings or the utilities for the operations of these offices.

Procedure:

Develop a matrix for off campus facilities to obtain fair IDC return percentages for each site. In some cases, the University has nothing vested in the structure or utilities. In others, there are some shared responsibilities.

Implications:

Would more fairly distribute IDC funds and increase funding to the County Offices and Agricultural Centers.

FCG Recommendation 18

Division: General/Education/Research/**Extension**/Business

Category: **Enhanced IT Conductivity**

Recommendation:

CALS invest or investigate the use of enhanced IT capabilities to allow for the distance delivery of programs to county offices and remote locations throughout the state.

Rationale:

Having campus-based or even Ag. Center-based faculty travelling across the state to deliver 30 minute programs is becoming increasingly difficult to justify given our new budget realities. A more efficient approach may be to allow the Specialist to present from her/his home base and deliver, in real time, their presentation. To have the ability to answer questions and to be able to do it without slow downs, interrupted speech, or poor **quality** video. Although distance learning is not new at the UA or even Extension, the locations of many of our offices make it difficult for us to obtain the level of quality needed and expected by our clientele.

Procedure:

Form a blue ribbon panel consisting of IT specialists along with campus-based and county-based faculty, to determine if there is an existing infrastructure available that could be used. Existing systems such as local community colleges, libraries or perhaps Arizona Health Network may have potential. If such a system cannot be identified, then the panel will identify the needs and the system which will meet those needs.

Implications:

This could actually cost the College money if an existing system cannot be identified – money we do not have at this time.

We will need to somehow assure that our Specialists do not lose touch with county faculty and clientele completely. The system will need to be used judiciously.

FCG Recommendation 19

Division: General/Education/Research/**Extension**/Business

Category: **Increase Revenue Generating and Cost Recovery**

Title: Market-based Revenue Generation

Recommendation:

This proposal recommends that University Arizona Cooperative Extension (UACE) seek strategies to augment program support through the expansion of revenue generation beyond cost recovery.

Rationale:

UACE has experienced severe budget cuts by state government over an extended period of time. To maintain its commitment to bringing the University to the citizens of Arizona and to preserve and enhance the quality and focus of such programs, ACE must develop means to generate revenue. Current policy for cost recovery and program development fees is based on the actual cost of delivering the program. The value of programming to the participant may be underestimated.

Procedure:
- As with current policy, if the cost of a program is covered by grant funds or if low-income individuals are the target audience, a fee is not required.
- With assistance from ACE, Extension agents and specialists will analyze the market value of programs offered by assessing fees charged by competitor organizations offering similar programming.
- The majority of the revenue generated through this process should be reinvested into the program area that generated the revenue.
- Portions of the revenue can be used for administrative program support or to support programming unable to charge fees.
- Fees do not have to be consistent across the state, but should reflect the market value of the area where the program is delivered.
- ACE should assist agents and specialists in the development of business plans outlining how revenue will be generated.

Implications:
- Procedures for cost recovery and program development fees will need to be reviewed.
- This proposal runs counter to the tradition of offering Extension programming for free or at a minimum cost to users.
- A revenue generating approach will require a mind-shift for many Extension agents and specialists who pride themselves in offering quality programming at minimal cost.
- Current policies for handling fees will be maintained.

FCG Recommendation 20

Division: General/Education/Research/**Extension**/Business

Category: **Faculty Salary Enhancements**

Title: Salary Incentive Program

Recommendation:

This proposed Salary Incentive Program provides an incentive for Extension Faculty on 12-month appointments to obtain external support for salary and, in turn, provides the opportunity to seek salary support, when appropriate, from external sponsors to enhance their programmatic impacts.

Rationale:

In the current system, faculty members at The University of Arizona with Extension appointments are restricted from in-state consulting due to conflict of interest. This severely limits the faculty's ability to enhance their salary, an option open to all other University faculty without Extension appointments. Furthermore, faculty on 12-month appointments do not have the opportunity to enhance their salary during the summer months.

Procedure:

Extension faculty on a 12-month contract and with a current 1.0FTE can opt to participate in the Salary Incentive Program.

Faculty in the Salary Incentive program will have their FTE reduced from 1.0FTE to 0.90FTE; however, their salaries will only be reduced by 5%. Faculty members will be expected to secure funding from granting agencies that increase their effort to 1.0FTE.

This program is voluntary. Faculty will be given the opportunity to participate at the beginning of the fiscal year 2012 or upon hire for new faculty members. All requests must be approved by the faculty's direct Unit Head (Department Head, School Director or Director of Extension), CALS Dean and the Provost, prior to being initiated.

As an example, if a faculty member currently receiving a salary of $50,000 were to opt into this incentive program, their salary would be reduced by 5% ($2,500) to $47,500, but their FTE would be reduced to 0.90FTE. Once they receive a grant that covers 10% of their salary, their effort would increase to 1.0FTE and their salary would increase to $52,250 ($2,250 above the original salary).

<u>Implications:</u>

A reduction in FTE will result in some reduced benefits such as contributions to the retirement plan and accrual of sick and vacation time.

Percent effort cannot exceed 1.0FTE.

Years of service will not be affected.

Salaries for newly hired faculty will be based on the full FTE.

If the Salary Incentive Program becomes popular, it could potentially decrease the total number of FTEs in the College.

If all eligible Extension faculty were to opt into this program, the potential savings in the current fiscal year is $611,000.

FCG Recommendation 21

Division: General/Education/Research/**Extension**/Business

Category: **Formula Funding Issues**

Title: Advocate Revamping USDA Formula Funding

Recommendation:

This proposal recommends that the University of Arizona College of Agriculture and Life Sciences advocate through the Arizona Congressional delegation for revamping of the USDA Formula Funding system contained within the Farm Bill currently under consideration in Congress.

Rationale:

University Arizona Cooperative Extension receives funding from the United States Department of Agriculture to support salaries and benefits of personnel, operations, travel expenses, and program development and implementation. Two examples of formula funding are Smith-Lever and EFNEP (Expanded Food and Nutrition Education Program). Each of these formulas uses as its basis the amount the state was receiving in 1962 and 1981, respectively, placing growing states like Arizona at a severe disadvantage.

Procedure:

As an example, the Expanded Food and Nutrition Education Program (EFNEP) formula is contained within the Food, Conservation, and Energy Act of 2008 (Public Law 110-246). The basis for the formula is the allocation each state received in FY 1981, which was $498,570 for Arizona. IN FY2012, Arizona was allocated $700,955. The formula is also based on the percentage of people within each state who live at or below 125% of the poverty level. Therefore, on a per capita basis, Arizona receives the lowest amount of all 50 states at $0.47 per resident (below 125% of poverty).

For comparison purposes, states with fewer residents at or below 125% of poverty receive far more in EFNEP funding due to the formula:

State	FY2012 $	Population at125% of Poverty
ARIZONA	$ 700,955	1,476,750
Alabama	$2,217,003	1,157,517
Arkansas	$1,417,193	708,304
Kentucky	$1,815,212	1,038,848
New Jersey	$1,146,959	1,166,632
South Carolina	$1,685,001	1,055,070
Virginia	$1,849,464	1,146,056
West Virginia	$1,141,081	427,436

Implications:

Due to lack of adequate funding, EFNEP is offered in only one-third of the counties in Arizona.

The EFNEP program could be expanded to meet the needs of the poor who live in rural areas of the state.

A cost benefit analysis of EFNEP conducted in California showed that for each dollar spent on this program, between $3.67 and $8.34 is saved in health care costs.

The EFNEP formula should be based on the number of residents within a state living at or below 125% of the poverty level

Formula funds should be revamped to make them more equitable or the funding should be made competitive.

FCG Recommendation 22

Division: **General**/Education/Research/Extension/Business

Category: **CALS Organizational Structure**

Title: New CALS Structure

Recommendation:

Reorganization of CALS academic units should be considered aiming at (a) reducing administrative costs, (b) highlighting the close ties between and among related programs and disciplines, (c) enhancing collaboration among faculty to maximize research potential and synergies in teaching, and (d) implementing distributed or shared administrative leadership among faculty. A potential model comprises three large Schools, where the faculty members in each School are organized into Programs based on academic, extension and research interests.

Rationale:

In the current CALS structure with 11 academic units, the faculty members are grouped into academic and research silos that tend to put artificial barriers to synergistic collaborations among the faculty. In certain instances, the Departmental divisions also appear to underscore perceived overlaps between units. Developing a concrete reorganizational proposal would require external input such as consultation of UA HR and the Provost, and possibly an outside organizational consultant.

Procedure:

A potential model comprises three large Schools, where the faculty members in each School are organized into Programs based on academic, extension and research interests. The faculty members select their Schools and Programs through open enrollment at the initiation of the reorganization. While a faculty member may choose to belong to more than one School or Program, he/she needs to choose a "home" School and Program for purposes of Annual Performance Review, Promotion and Tenure, etc.
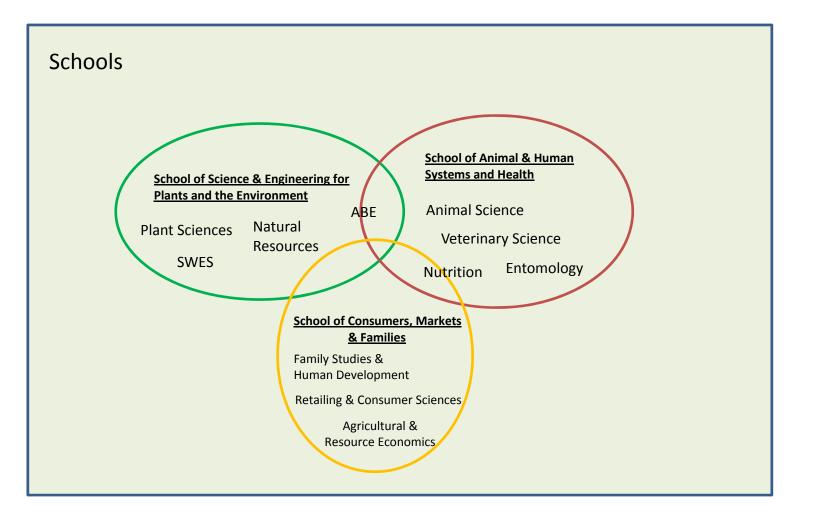
Each Schools' administration would consist of a Director and an Associate Director, with the Associate Director concentrating on academic affairs and student issues. Coordinators for Undergraduate and Graduate Programs would serve under the Associate Director. All business operations would be centralized at the School level.

The School faculty would be organized into Programs based on academic, extension and research interests. Each program would have a Chair (i.e., an elected faculty member in the Program rotating at 2 to 3 years), but all other Program affairs would be accomplished through committees. The Programs would be responsible for Annual Performance Reviews, Promotion and Tenure, and maintaining domain-specific academic and research programs. Program faculty and staff would be responsible for undergraduate advising. Programs also would be maintained

for accreditation purposes. To incentivize research and collaboration, overhead should be returned to the programs based on their research productivity.

A preliminary version of the proposed CALS organization may look as shown on the next page.

Details of the proposed organization structure would require input from across CALS.

Schools

School of Science & Engineering for Plants and the Environment

Plant Sciences   Natural Resources

SWES

ABE

School of Animal & Human Systems and Health

Animal Science

Veterinary Science

Nutrition   Entomology

School of Consumers, Markets & Families

Family Studies & Human Development

Retailing & Consumer Sciences

Agricultural & Resource Economics

FCG Recommendation 23

Division: **General**/Education/Research/Extension/Business

Category: Efficiency of faculty hiring and retention

Recommendation:

Increase average tenure of tenure-track faculty and decrease regrettable attrition.

Rationale:

From fy05 to fy09, 31 percent of new faculty hires left CALS before going up for tenure. This causes tremendous replacement cost and lost opportunities. Also, UA/CALS should not be the launching pad for academic careers elsewhere but offer an attractive career path by offering better support for Assistant Professors/new hires on tenure-track and keeping high-performing faculty members.

Procedure:

1. The (opportunity) cost of faculty attrition needs to be calculated. A simple estimate of the cost of an average hiring process (in this case, the Norton School) which includes the cost of the search (including committee cost), campus visits, and moving cost allowance (excluding salaries or start-up funds) comes up to $20,980. Based on this estimate, replacing the 21 candidates CALS lost in fy05 to fy09 equals $440,580.
2. Quality of Attrition is a central measure to gauge overall talent management effectiveness. A combination of metrics (a scorecard) can be developed by for instance including the regrettable termination rate (metric of employees who left CALS but whom we had planned to retain); the non-regrettable termination rate (metric of employees who left CALS but whose departure did not negatively affect us); the controllable separation rate (metric of employees who left for a reason that, if known, we may have been able to address such as dissatisfied with career opportunities); the uncontrollable separation rate (metric of employees who left for a reason that, if known, we could not have prevented such as spousal relocation); new-hire separation rate (metric of employees who left within a specified period after their hire date such as before receiving tenure). We need to collaborate with UA HR on this important and potentially UA-wide issue.
3. Investigation of the (potential) causes of regrettable loss includes surveys or interviews of new hires/tenure-track faculty; interviews of lost faculty where feasible; statements of departments regarding regrettable attrition.
4. Development and evaluation of programs for better retention of new faculty.
5. Evaluation of the efficiency of search processes.

Implications:

UA/CALS needs to develop a profile as the number one academic employer in Arizona, preferably the Southwest, preferably nationwide. The high attrition rate of new faculty imperils our standing as a top tier research university; the cohesiveness of our programs; and the learning experience of our students. Higher retention rates increase research funding as well as job satisfaction among faculty and staff. Increasing retention rates is not cost-free but should lead to comparatively high ROI. A state-of-the-art HR management system and constant monitoring of the effectiveness and efficiency of retention is required.

FCG Recommendation 24

Division: **General**/Education/Research/Extension/Business

Category: Total Value System for Faculty Contributions

Recommendation:

Develop a new metric to establish the Total Value of individual faculty incorporating contributions in research, education, service and outreach as well as cost.

Rationale:

It is important to recognize that faculty not only need a more contemporary incentive system that is more flexible in adapting to the changing environment in Higher Ed but that it is also clear that expectations have changed regarding faculty contributions after tenure. This sends a message that CALS is interested in challenging faculty to increase their performance by offering fair recognition to those faculty who work hard for the success of their program/CALS/UA and potentially discourages shirking behaviors on the job.

Procedure:

1. We recognize that a single metric is not helpful in determining a faculty member's performance. Most likely, a set of quantitative and qualitative data are necessary to come to "fair" as well as manageable evaluations. However, there will be a set of KPIs (Key Performance Indicators) we could combine to determine the total value of a professor.
2. Obviously, a total value system for professors needs to be structured according to their different responsibilities as well as a comprehensive view of the total cost they cause. Also, program/department structure and specificities of the individual research discipline need to be taken into account.
3. In marketing, customer lifetime value is a metric used to determine if a customer is worth investing in. Similar models have been developed for HR purposes to determine employee contributions.
4. Developing such a model could be a worthwhile project for a grad student in Economics or in collaboration with Eller College of Management.

Implications:

A Total Value System for evaluating faculty contributions will never be "perfect". However, it may be more goal-oriented than current P&T "metrics" and also sends the message to under-performing faculty that enhanced performance is required after tenure.

The FCG presents the following as a way to initiate a dialog across the College.

Statement of CALS's Administrative and Management Principles

1. CALS is first and foremost a College of faculty. The faculty constitutes the core of CALS as they deliver CALS's triumvirate functions of education, research and extension.

2. The CALS administrators and staff exist in support of the faculty, enabling and equipping the faculty to do their best work in delivering CALS's triumvirate functions.

3. CALS as a unit of The University of Arizona works for the State of Arizona and serves its various stakeholders (students, commodity groups, industry, general public, etc.).

4. CALS's infrastructures (e.g., laboratory, office, building, experiments station, etc.) do not belong to any faculty or administrator, but to the State.

5. CALS upholds open communication, diversity, equity, transparency and accountability among its faculty, administrators and staff.

6. CALS upholds synergistic cooperation and cohesion to achieve optimal effectiveness and efficiency in the delivery of its triumvirate functions.

7. A unit within CALS should focus on what it does best with respect to education, research and extension both in terms of its expertise and its beneficial impact on stakeholders.

8. CALS supports its faculty to effect transitions in the distribution of their responsibilities over their career lifespan to maintain maximal effectiveness in their delivery of CALS triumvirate functions.

<u>Co-Chairs' Summary</u>

1. Faculty

a) Improve efficiency of faculty hiring and retention
b) Capture faculty total value contribution
c) Allow for transitions in the distribution of faculty responsibilities over their career lifespan to maintain maximal effectiveness in their delivery of CALS triumvirate functions
d) Harness faculty shared leadership by practicing distributed leadership
e) Faculty salary enhancements
f) Provide incentives for faculty retirement and/or resignation

2. CALS Organization

a) Harness faculty shared leadership by practicing distributed leadership
b) Reduce administrative costs
c) Highlight close ties between and among related programs and disciplines and remove overlaps
d) Enhance collaboration among faculty to maximize research potential and synergies in teaching

3. CALS Business Functions and Infrastructures

a) Improve proposal routing
b) Provide support for research-proposal preparations
c) Improve Experiment Station Efficiency
d) Enhance IT connectivity for Extension and offering of online courses

4. Revenue Generation

a) Support for proposal preparation and routing
b) Sponsorship from donors, alumni, etc.
c) Cost recovery and income-generating activities for units (entrepreneurial ideas)
d) Renegotiate IDC returns for off-campus locations
e) Formula Funding Issues
f) Online courses and certification programs (infrastructures and support) for increased enrollments
g) Develop cooperation with China and other countries to diversify and enlarge student base
h) Development of 2+2 programs with community colleges

5. Cost Reduction

a) CALS reorganization
b) Experiment stations efficiency
c) Efficiency of faculty hiring and retention
d) Provide incentives for faculty retirement and/or resignation
e) Reducing the amount of overlap between programs (e.g., water programs) should be considered where possible
f) Improve efficiency of student advising without sacrificing quality

06/05/12

<mark>All Calculations Assume that All Associate Dean Positions are Preserved (just for the sake of these calculations)</mark>

Case 1 -- Assumes all Directors, Associate Directors and Chairs as New FTEs

CALS average salaries - as of 5/15/12
Units included: ABE, AREC, Ag Ed, An Sci, Ento, FCS, Nutr Sci, Pl Sci, SNRE, SWES, Vet Sci

	Current						Proposed					
	Count	Fac base salary	Admin stipend	Emp Total	Stipend %	Total	Count	Fac base salary	Admin stipend	Emp Total	Stipend %	Total
Unit heads/dept heads/directors:	11	155,800	18,700	174,500	12.0%	1,919,500	3	150,000	30,000	180,000	20.0%	540,000
Associate directors	2	99,900	9,900	109,800	9.9%	219,600	3	125,000	12,500	137,500	10.0%	412,500
Program leads	0	0	0	0		0	18	100,000	5,000	105,000	5.0%	1,890,000
						2,139,100						2,842,500

Savings = **-703,400** Assumes all positions as new FTEs

Full professors w/Acad contract	49	118,500
Full professors w/Fiscal contract	16	102,400
Associate professors w/Acad contract	38	83,500
Associate professors w/Fiscal contract	8	80,200
Assistant professors w/Acad contract	27	72,400
Assistant professors w/Fiscal contract	1	72,100

Case 2 -- Assumes 3 Directors as new FTEs

CALS average salaries - as of 5/15/12
Units included: ABE, AREC, Ag Ed, An Sci, Ento, FCS, Nutr Sci, Pl Sci, SNRE, SWES, Vet Sci

	Current						Proposed					
	Count	Fac base salary	Admin stipend	Emp Total	Stipend %	Total	Count	Fac base salary	Admin stipend	Emp Total	Stipend %	Total
Unit heads/dept heads/directors:	11	155,800	18,700	174,500	12.0%	1,919,500	3	150,000	30,000	180,000	20.0%	540,000
Associate directors	2	99,900	9,900	109,800	9.9%	219,600	3	125,000	12,500	137,500	10.0%	37,500 *stipends only*
Program leads	0	0	0	0		0	18	120,000	12,000	132,000	10.0%	216,000 *stipends only*
						2,139,100						793,500

Savings = **1,345,600** Assumes 3 School Directors are new FTEs

Full professors w/Acad contract	49	118,500
Full professors w/Fiscal contract	16	102,400
Associate professors w/Acad contract	38	83,500
Associate professors w/Fiscal contract	8	80,200
Assistant professors w/Acad contract	27	72,400
Assistant professors w/Fiscal contract	1	72,100

Case 3 -- Assumes no new FTEs

CALS average salaries - as of 5/15/12
Units included: ABE, AREC, Ag Ed, An Sci, Ento, FCS, Nutr Sci, Pl Sci, SNRE, SWES, Vet Sci

	Current						Proposed					
	Count	Fac base salary	Admin stipend	Emp Total	Stipend %	Total	Count	Fac base salary	Admin stipend	Emp Total	Stipend %	Total
Unit heads/dept heads/directors:	11	155,800	18,700	174,500	12.0%	1,919,500	3	150,000	30,000	180,000	20.0%	90,000 *stipends only*
Associate directors	2	99,900	9,900	109,800	9.9%	219,600	3	125,000	12,500	137,500	10.0%	37,500 *stipends only*
Program leads	0	0	0	0		0	18	120,000	12,000	132,000	10.0%	216,000 *stipends only*
						2,139,100						343,500

Savings = **1,795,600** Assumes no new FTEs

Full professors w/Acad contract	49	118,500
Full professors w/Fiscal contract	16	102,400
Associate professors w/Acad contract	38	83,500
Associate professors w/Fiscal contract	8	80,200
Assistant professors w/Acad contract	27	72,400
Assistant professors w/Fiscal contract	1	72,100