

University of Colorado Boulder

2023 Program Review

Division of Academic Affairs (DAA)

Academic Review and Planning Advisory Committee Report

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Process Overview

The Academic Review and Planning Advisory Committee (ARPAC) review of the Division of Academic Affairs (DAA) was conducted in accordance with the 2023 program review guidelines. Self-study responses were prepared by the unit and checked by all ARPAC members assigned as liaisons to individual responses. The ARPAC liaisons submitted a summary of findings derived from the self-study. An external review committee (ERC), consisting of two experts from outside of the University of Colorado Boulder, engaged in a virtual visit and submitted a report based upon review of relevant documents and meetings with faculty, staff, and student unit members and university administrators. ARPAC staff, using web conferencing tools, facilitated the external review as a remote visit over May 17-19, 2023. ARPAC reviewed and considered these materials, met with the provost, and wrote this report. Discovery process summary and external reviewer comments and recommendations are shared when relevant throughout this report.

Unit Overview

At the time of the writing of the self-study, the Division of Academic Affairs comprised 14 offices, 9 reporting directly to the Provost and the remainder to the Vice Chancellor for Academic Resource Management (3 offices) or the Senior Vice Provost for Academic Planning and Assessment (2 offices). The reporting structure is indicated below and is further outlined in the Division's organizational chart, included with the self-study. These units include:

Academic Planning & Assessment (APA)
Academic Resources Management (ARM)
Academic & Learning Innovation (reports to ARM)
Athletics-Student Services
Center for Teaching & Learning (reports to APA)
Continuing Education (reports to ARM)
Faculty Affairs
Graduate School (reports to ARM)
Office for Diversity, Equity & Community Engagement
Office of the Provost
Ombuds
Research and Innovation (RIO)
Student Affairs
Undergraduate Education (reports to APA)

As of July 1, 2023, the functions of the Office for Diversity, Equity & Community Engagement (ODECE) were disaggregated into different offices within Academic Affairs (Undergraduate Education; Student Affairs) and Strategic Resources Support (Diversity, Equity & Inclusion; Enrollment Management), and ODECE ceased to exist as a separate entity.

Past Review

The Division of Academic Affairs underwent its first review in 2015 as part of a revision of the program review process. ARPAC issued a 55-page report on DAA, drawing on the self-study, internal review committee (IRC) reports (the IRC has now been replaced by the ARPAC committee's discovery summary process), and a report from the ERC. In that review, unlike the current one, each of the units then reporting to the provost were reviewed, and ARPAC also looked at Academic Affairs as a whole. ARPAC provided an analysis of and recommendations for each of these units. The units reviewed were: the

Office of Diversity, Equity, and Community Engagement; the Office of Faculty Affairs (OFA); the Office of the Dean of the Graduate School; the Ombuds Office; the Office of the Vice Chancellor for Research; the Office of the Senior Vice Provost; the Office of Student Affairs; and the Office of Undergraduate Education. The Division of Academic Affairs has undergone significant reorganization since that review; for example, ODECE's programs have been redistributed to other units, and the functions of the then Senior Vice Provost were assigned to two different officers. The current review is also driven by prompts from the Academic Futures report answered collectively. The match between the prior review and the current one is less obvious than, say, reviews of the Department of Physics in two different cycles.

ARPAC received follow-up reports from many of the reviewed units; the provost's office responded to recommendations directed at particular units.

ARPAC overall found that the Division of Academic Affairs, the provost, and those reporting to him were performing their duties well. There were large questions raised about adequate funding and staffing and about collaborations between various offices with DAA. ARPAC, following the ERC and comparisons with other campuses, raised questions about whether other units should report to the provost. These included: Institutional Research, Admissions, Enrollment Management, the Registrar, the Office of Information Technology, and the CAD/Documentation Management Office. ARPAC argued to both the provost and the chancellor that these units might well report to the provost to increase the likelihood of DAA meeting campus goals. To date, only the Office of the Registrar has been moved.

ARPAC raised questions about funding, both the budget model for the campus and funding within DAA. Financial Futures and the new budget model are responses to such questions that have significantly changed the landscape. Staffing/funding within various DAA units remains an issue.

Diversity was of central concern to the ARPAC report. The campus has made strong efforts to improve diversity and inclusion which, among other things, involved the reorganization of ODECE. As a result, many of these recommendations are moot.

In recommendations to both OFA and the provost, ARPAC expressed concerns about the protection of faculty rights within various investigatory processes. In particular, they recommended that "no significant punitive action...is taken against a faculty member until the vice provost and associate vice chancellor for faculty affairs is consulted to ensure that disciplinary processes and proposed sanctions are appropriate and consistent with established norms." In response, OFA indicated it worked to protect faculty rights in many different ways, but that this particular recommendation was not pursued. Faculty governance groups participate in processes related to misconduct, sanctions, and appeals. For example, OFA and the Boulder Faculty Assembly (BFA) worked together to revise the Professional Rights & Responsibilities (PRR) document (which is essentially our campus' faculty code of conduct) and it now more clearly delineates faculty rights and participatory procedures around grievances. The BFA's grievance committee now functions in an advisory capacity to faculty involved in a grievance, PRR action, or appeal. And the Vice Chancellor's Advisory Committee (VCAC) advises the provost regarding faculty sanctions as well.

Analysis and Recommendations

The focus of this Division of Academic Affairs review is on the progress made by DAA as a whole, and by its constituent offices, on the recommendations outlined by and for the campus in the 2018 Academic Futures report. DAA's study and ARPAC's review of DAA are therefore geared towards a holistic review

of these offices in collaboration with each other, rather than focusing on each office individually. In DAA's self-study, all of DAA's offices contributed in one way or another to the prompts outlined below.

The introduction to the self-study and the response to Evaluation Topic 14: DAA Strategic Planning frame the entire document, essentially looking both backward and forward as the body of the document provides insights into the current work of DAA. While the report is designed in the first instance to respond to the recommendations of the Academic Futures Report (2018), it also addresses other processes, including the last ARPAC review, and takes into account major changes to higher education along with extraordinary challenges to the campus, including the COVID 19 pandemic.

ARPAC wants to begin by praising DAA and the entire campus for its handling of the pandemic. In very difficult times, DAA and Strategic Resources and Support offices managed to take care of our community while enabling all of us to continue our mission of teaching and discovery. ARPAC believes that CU was exemplary in its response to COVID-19, not least in that it demonstrated how a public research university can both bring knowledge (testing, air quality, etc.) to the public and offer it important services. Putting science and knowledge first was a key embrace of our identity as a comprehensive public research university.

The pandemic along with the fiscal problems it created of necessity slowed actions on Academic Futures recommendations. This delay does not mean there is no progress at all. Building on Foundations of Excellence as well as Academic Futures, the campus has made important strides in creating a student-centered campus. The establishment of the Center for Teaching and Learning may be the single most concrete achievement of the last few years. Drawing on the Inclusion, Diversity, and Excellence in Academics (IDEA) plan and responding to national events, the campus has also moved to address issues of justice, equity, diversity, and inclusion. RIO and the faculty have continued to grow our research enterprise. The research, scholarship, and creative work of the faculty and researchers continues to be internationally recognized for its excellence. Financial Futures (created alongside Academic Futures) and the groups working on the new budget model have, after many years of discussion, moved the campus off its old largely static budgeting processes. ARPAC applauds these, among other, achievements.

However, as ARPAC moved through the self-study, it was constantly reminded of the distance between where we are and what Academic Futures envisioned. We recognize that there is a large difference between, on one hand, a process freed from the constraints of money, time, and space that seeks to create a vision and, on the other hand, the day-to-day work of running the campus and implementing change. Still, Academic Futures was a community-wide endeavor that created a mandate for a core set of projects. Many people on the campus participated in the town halls and many other kinds of sessions led by the provost's office. It was a project marked by good faith, trust, and sincere engagement between all the constituencies in the university. The final document, in many regards, spoke with the campus' voice to its leadership. While it offered vision, it also provided measurable goals and concrete first steps. While ARPAC, again, applauds the milestones that DAA has achieved, this exercise called upon the committee to note the gaps between what Academic Futures proposed and what has actually been accomplished.

As noted, key goals and concrete actions have been set aside. In the report, DAA itself states that it has concentrated on creating a student-centered campus, where there are considerable achievements to note, and on the issue of teaching and technology, where ARPAC finds a more mixed record. DAA makes explicit its decision to put off actions on interdisciplinarity and internationalization, given time and resources. ARPAC recommends returning to the Academic Futures core recommendations on these two projects:

Interdisciplinarity:

Big Idea: Affirm interdisciplinarity as a key value in our teaching, research, and creative work **Goal**: Expand our status as a dynamic center for interdisciplinary teaching, research, and creative work by eliminating impediments to that work and by clearly rewarding these efforts

Concrete First Steps:

- Grant the tenured and tenure-track faculty control over every fourth course they teach in order to invest it in team-teaching, interdisciplinary programs, or any other endeavor they wish to join
- Create a Vice Chancellor for Interdisciplinary Teaching, Research, and Creative Work and Dean of Interdisciplinary Faculty who, among other responsibilities, will work to transform our evaluation of interdisciplinary efforts in personnel decisions and budgeting.

Internationalization:

Big Idea: Act in the world to address the era of globalization

Goal: Coordinated efforts to provide essential support for our international students, to expand international opportunities for our U.S. students and to galvanize our international research and creative work, particularly as we seek to address challenges facing global society

Concrete First Steps:

• Charge the proposed Vice Provost for Education with duties specific to accelerating campus-wide internationalization

On these two particular topics, ARPAC asks that DAA either make a commitment, including a commitment of resources, to these projects or, alternatively, inform the campus that these are no longer priorities for DAA. ARPAC recognizes that Academic Futures is not gospel. We do not have to do what it recommends, but we should make clear where we are moving away from or beyond that report.

ARPAC finds there is another issue that moves beyond the delay of work on interdisciplinary and internationalization and the mixed results on technology and teaching: the lack of a coherent vision. That does not mean there is no vision, but perhaps as a result of the way the self-study process was conducted, the report tends to aggregate lists of accomplishments made before and after Academic Futures. The report does not provide a coherent vision, whether that of Academic Futures or some newer plan; the report defaults to listing rather than presenting a vision, including criteria for a prioritization of the list. Without a cogent presentation of vision, it is hard to see how decisions for new directions can be made with intention in order to move towards identifiable strategic outcomes; a vision needs to be woven into all the localized work of DAA. ARPAC in several places calls upon the provost to make clearer the goals towards which DAA is moving. As we continue to recover from the pandemic and its collateral damage, the campus needs leadership to project a clear, powerful vision.

A related issue is the diffusion of authority, responsibility, and accountability for Academic Futures priorities exacerbated by an apparent lack of enthusiasm on the part of the provost to create any of the new administrative positions called for in Academic Futures. Academic Futures understood the campus' concerns about the expansion of administrators and staff, but they believed that in order to move forward on major projects someone needs to be in charge, someone needs to have the authority to act and the responsibility to be judged by results: someone needs to be accountable. ARPAC is less enamored of creating new "champions" than the Academic Futures report is, but it does try to make recommendations to create structures to drive projects forward. The particular administrative structure is less important than the creation of clear lines of authority and accountability.

Throughout its work on its report, ARPAC found it did not have all the data it needed to make informed responses and recommendations. Another theme running through this report is the need to make clearer and more public the data that DAA uses in making its decisions. ARPAC believes the campus wants to see leaders drawing on data as they put key ideas into practice; this may be particularly important with the key imperative of student success. Members of the committee were given the distinct impression that decisions were being made without fully taking into account important data, including data that is already available, and that decision makers were not always adept at using the data they needed. The perceived absence of data and data use may be a communication problem, but it leads ARPAC to raise this perceived lack of transparency as an ongoing concern.

ARPAC applauds DAA's diversity, equity, and inclusion (DEI)/ justice, equality, diversity and inclusion (JEDI) efforts but notes that we must all always recommit to this important work, and we need to establish clear, measurable goals and hold ourselves accountable for meeting them.

ARPAC was surprised that there were no requests for additional resources to carry out DAA's mission, and, as a result, the report does not provide fiscal prioritization for listed activities. That is perhaps understandable given that the ARPAC process reports to the provost, and, in essence, the provost would be asking themselves for funds. However, additional resources are needed, and ARPAC makes several recommendations for finding new resources for offices and projects within DAA, for example, in the case of RIO where more money is clearly needed. A more integrated approach to academic prioritization and associated financial resources is needed for the campus. The strategic vision and supporting priorities should serve as the gateway for resourcing decisions. To achieve this, ARPAC recommends that the chief operating officer (COO) report to the provost so that DAA has control of the campus' budget and can make needed decisions about supporting the core mission of the campus through the filter of its strategic priorities.

Lastly, ARPAC recognizes this report is being finalized as the campus awaits the appointment of a new chancellor. With a change in leadership, this is the moment for the Chancellor, the Provost, and the COO either to reaffirm the vision that the campus voiced through Academic Futures or to announce a new direction.

4.1 Evaluation Topic #1: The Public Good

Topic and Offices

In their 2018 report, the Academic Futures Committee called on the University of Colorado Boulder to "embrace its core mission of furthering the public good" in teaching, research, and service. The DAA was invited to document and to demonstrate how its offices are moving the mission of the university forward. Specifically, the DAA was asked to describe how their work contributes to the university's identity as a public research university in three main areas: the importance to the growth of our students of a liberal arts education, including the sciences, social sciences, humanities, and arts; the financial health of the campus and its students; and the role of public facing scholarship and engagement.

While the Associate Vice Chancellor and Chief of Staff took the lead in the analysis of this topic, many offices were engaged with the self-study tasks and described how they have integrated serving the public good into their work. The self-study mentions new initiatives from the following offices: Academic Planning & Assessment, Faculty Affairs, Office of the Provost, Research and Innovation Office (RIO), Academic Resource Management, Continuing Education, and the Office for Diversity, Equity & Community Engagement.

Achievements

The self-study lists a number of programs and initiatives that illustrate the DAA's contributions to furthering the public good. Of particular note, the university's response to the pandemic has been remarkable in deploying various resources, spaces, and expertise to inform the public about the disease, protection against the virus, the number of cases on campus, testing, vaccine distribution, and various other measures to ensure the health and well-being of students, faculty, and staff and the larger community of Boulder.

In regard to their commitment to the value of a liberal arts education, DAA offices led the creation and ongoing implementation of a common undergraduate curriculum. The Provost charged a faculty committee to produce a new undergraduate curriculum built upon a liberal arts framework. The curriculum was approved by the faculty and includes learning objectives designed to produce an informed and public-minded citizenry. DAA offices provided resources to support this faculty-led effort and will soon develop the appropriate infrastructure for implementation and assessment.

Following the Academic Futures' recommendation to keep public education affordable and open, the DAA enhanced student financial health by investing in advising, the Writing Center, mental health services, and online education. In addition, they increased stipends for graduate students and reduced fees for residential academic programs and undergraduate Living and Learning Communities. Since the 2015 ARPAC report, the DAA has created The Program in Exploratory Studies to assist undergraduate students who are undecided about a major or unable to access their preferred college or school in their first year. DAA leadership is also focusing efforts on recruiting students from underserved communities and exploring low-cost master's degree programs. DAA offices were actively involved in redesigning the campus budget model. The new budget model promises to gradually boost the financial health of the university and features new incentives to improve student retention and graduation.

DAA's efforts to support public facing scholarship and engagement are primarily concentrated in the offices of RIO, Faculty Affairs, and the Office of Outreach and Engagement (OOE) within Continuing Education. The OOE has significantly increased its funding of public scholarship and engagement projects. These efforts connect CU faculty and students with communities in the state of Colorado and beyond. Other initiatives spearheaded by the OOE include a free public lecture series called "CU on the Weekend" which features CU faculty and makes their research more accessible to local communities. Faculty Affairs partnered with OOE to discuss the definitions of outreach and engagement work, and in 2022, Faculty Affairs began to offer an outreach reporting option in the annual Faculty Report of Professional Activities (FRPA) in teaching, research, and service with the aim of collecting better data on the nature and volume of publicly engaged work by faculty.

External Review Committee Feedback

In their report, the ERC notes that CU Boulder is facing a "typical challenge" in developing a clear narrative of what it means by the public good. The report recommends that Faculty Affairs work closely with the Communications and Outreach teams to design a common framework that defines the public good and find a better way to account for and assess the outcome of this work.

ARPAC Analysis

The ARPAC committee acknowledges the important and sustained work the DAA offices have undertaken to advance the public mission of the university. We admire the public-spirited work the DAA did under the pandemic, and we realize that COVID-19 may have interrupted the stride of these offices

in this area. However, we believe more can be done to build on the initiatives the DAA has developed thus far. As a start, a clearer definition of what is meant by "the public good" is needed to communicate a common understanding of what is expected of faculty and students under this framework. The self-study lists a number of initiatives and accomplishments across the DAA offices, but the category of the public good seems to encompass a broad range of activities that lack a central and clear structure of what the institutional objectives are and how faculty and students can contribute to furthering this crucial part of the university's mission. We ask who should be in charge of developing this structure and the vision behind the public good? We believe the DAA should work more insistently with units across campus not only to curate and to communicate this vision but also to find more concrete ways of assessing the impact of all the initiatives carried out under the banner of the public good. A return to the Academic Futures vision might be a good place to start. If DAA agrees with that account, it could make that commitment more clearly and forcefully.

The DAA is right to emphasize the importance of sharing knowledge and making it accessible to the larger public, but it is not clear what resources and guidance have been put in place to disseminate research and scholarship beyond the university. ARPAC acknowledges that the campus is awaiting guidance from government and granting institutions. However, the committee encourages DAA to invest in the infrastructure for research data management, self-archiving, and open access publishing. The DAA could charge the Research & Innovation Office (RIO) to continue to work with the Office of Contracts and Grants and the University Libraries to increase awareness of and compliance with policies such as the White House Office of Science and Technology Policy (OSTP) memo on open access of federally funded research. Beyond that, we believe the DAA should build on its efforts to disseminate CU Boulder scholarship as widely as possible and make our research and creative outputs freely available to everyone, especially to the Colorado taxpayers who need to be better informed about how this university serves the public good. To reach these goals, additional funding for RIO may be needed, an issue taken up in the response to Evaluation Topic 2.

The Office of Outreach and Engagement in Continuing Education has been a significant asset to support public facing and community-based research and creative work across campus. However, we are concerned that this kind of work remains limited to the efforts of one office so that we may not be harnessing an opportunity for other offices to participate and to integrate public good initiatives more fully into their activities. A closer relationship between RIO as the steward of research, scholarship, and creative work and OOE as the office tasked with taking that work to the public is desirable. It might be worth considering making OOE even more central to campus efforts by placing it inside RIO.

Given the polarizing nature of public-facing discourse, ARPAC is pleased with the DAA's efforts to protect academic freedom and assist faculty who receive threats because of their scholarship and public engagement. We believe more can be done to deal with a disturbing rise in the intimidation of faculty exercising their academic freedom, particularly to protect vulnerable members of our community who are targeted because of their gender, ethnicity, race, religion, or sexual orientation. The DAA should work closely with Faculty Governance to develop high-level statements that clearly outline our position and reassert the core values of academic freedom. We acknowledge the work that the Office of the Provost's communication specialists have done in this area by creating a website and organizing open meetings for faculty, but we recommend developing a guide with more practical advice about how to handle complaints and threats, and how to deal with instances of public intimidation.

Finally, ARPAC is concerned with how CU Boulder can maintain its commitment to the public good when we are increasingly denied state funding and forced to rely on tuition-based revenue and private grants and partnerships to fund research on this campus. We must acknowledge the tension inherent in the

fact that we are a public university that is increasingly forced to generate revenue from the corporate world. How do we understand ourselves still as a public institution and how should we articulate the public nature and role of all our activities in this context? We believe this is a crucial task for the DAA to address this tension and to insist on our duty to think of our research, creative work, and teaching as a public trust always in the service of the circulation of knowledge and its affordability as a public good. We must continually remind state government of our commitment to this mission and of their responsibility to support public education.

Recommendations

To the Unit:

- 1. Reassert our mission as a public serving research university even though we have virtually no public funding. ARPAC agrees with the external reviewers that we need to clearly define and develop a shared understanding of what is meant by the public good. The DAA should provide leadership, vision, and a framework for the rest of the campus by outlining the institutional objectives in service of the "public good" to avoid confusion and diffusion of efforts in this area.
- Given the lack of state funding, create a task force to explore different tuition models and other sources of funding to increase the academic budget of the campus. Administrators need to adopt a mindset in which we see funding as similar to a private institution even as we work to serve the public good.
- 3. Increase financial and other support for public research, scholarship, and creative work. DAA should provide more resources as well as guidance to support the public dissemination of CU research, scholarship, and creative work. This could include having RIO and the Office of Contracts and Grants continue to work with the University Libraries to increase awareness of, compliance with, and support for open access policies. It could also include dedicating a portion of the Strategic Fund to support open access publishing as a campus-wide priority.
- 4. Integrate the public good more seamlessly in the activities of all DAA offices and units across campus. For example, expand support for public scholarship and engagement that links the efforts of the Office of Outreach and Engagement in Continuing Education with other units across campus. Consider moving the OOE into RIO to unite research and its public dissemination.
- 5. Continue to engage faculty and students in open for a about our rights and responsibilities concerning academic freedom, as distinct from freedom of speech. Develop additional guidance with practical advice about how to handle complaints and threats, and to deal with instances of contestations of academic speech including harassment, targeting, doxxing, etc.
- 6. Consider placing outposts of public research, scholarship, and creative works in public libraries and other public spaces across the state to bring the work of CU to communities statewide. Consider further integration of CU Experts and CU Scholar to improve discovery of and access to scholarly work produced at CU.

4.2 Evaluation Topic #2: Research Excellence

Topic and Offices

The self-study summarizes efforts by the DAA in achieving the vision outlined by the Academic Futures report, specifically addressing public-facing and public-serving work, student research involvement, and growth in terms of interdisciplinary and international work pursued by CU scholars. These efforts primarily involve RIO, as well as the Office of Advancement, the Office of Strategic Relations and Communications, the Global Engagement Office, Faculty Affairs, and Academic Resource Management. Additionally, the DAA serves a broad range of constituents in matters pertaining to excellence in research.

Achievements

The Research and Innovation Office was created in 2016 from the former Office of the Vice Chancellor for Research, with new responsibilities including housing the Dean of the Institutes, administering Venture Partners (formerly the Office of Technology Transfer), and managing the Grand Challenge project. RIO offers three main services and initiatives: Research Development, Research Administration, and Partnership and Innovation.

Under the umbrella of Partnership and Innovation, RIO has launched a long list of new initiatives to support entrepreneurship and translational research. Some, like AB Nexus, are meant to foster development of partnerships across disciplines. Others are designed to connect research and creative work with the business community, as in the Innovation and Entrepreneurship initiative and the renamed Venture Partners. The emphasis on entrepreneurship and business is evident in the composition of RIO's External Advisory Board, which has greater representation from industry and government agencies than from academia and non-profits.

In support of Research Development and Research Administration, RIO has added an Office of Postdoctoral Affairs, a communications team, and an Assistant Dean of Budget and Finance for the Institutes. Together with other DAA offices, RIO has worked to provide the infrastructure and resources necessary to support continued growth of research work in accordance with the priorities identified in the Academic Futures report.

External funding for research and creative work has increased consistently over the past 10 years resulting in an 87% increase in total grant funding over this period. The growth is mostly due to an increase in the size of individual grants, as well as a modest (8%) increase in the number of proposals submitted. The self-study notes that the complexity of these proposals has increased in terms of the number of subcontracts and collaborators as well as compliance requirements, although ARPAC notes that there is little information quantifying this increase in complexity beyond a couple of examples of very large grants. More than half (56%) of FY2022 awards are to researchers and faculty rostered in institutes administered by RIO.

In 2018, RIO launched the RIO Faculty Fellows Program to develop leadership skills in particularly promising CU faculty who are poised to lead large collaborations. ARPAC notes that the demographics of the people who have joined the Faculty Fellows program have been fairly diverse in terms of gender and discipline, though skewing young. In addition, the Seed Grant program has been particularly successful in supporting innovative ideas; the self-study reports that for every dollar invested, it has brought in a \$4.58 return from external funding.

External Review Committee Feedback

The External Review Committee recommended the addition of program/project managers to support large, complex projects. The ERC also highlighted the necessity of establishing clear goals for undergraduate students' participation in research in order to support campus goals of student retention and completion. Specifically, the ERC suggests setting up an Office of Undergraduate Research that could work to connect students to research projects, open avenues for students to find opportunities, train faculty in mentoring undergraduates, and set targets for undergraduate participation in research while tracking progress toward those targets.

ARPAC Analysis

The work and number of new initiatives that RIO has launched to support the development of external collaborations is impressive, and as the self-study argues, this is a possible force for advancing both economic and public good. There are several areas, however, where ARPAC thinks that RIO could rebalance its efforts to cultivate and support the research and creative enterprise that underlie research excellence.

ARPAC worries that economic and public good are not always aligned and would like to see the explicit inclusion of these considerations reflected in the membership of the various advisory boards. In addition, ARPAC would like to see a greater representation on the External Advisory Board of academics who are familiar with the opportunities and challenges faced by university faculty and researchers.

There seems to be an imbalance in new initiatives toward those supporting the commercialization of research and development at CU over those supporting the underlying primary research engine driving those opportunities. Two arenas where support for basic research is needed stand out in this regard. First, the establishment of a Shared Instrumentation Network under a Director of Core Facilities and Shared Instrumentation has foundered with the loss of its Director to Stanford. Second, the much-needed support for regulatory compliance focuses on identifying regulatory requirements more than on assisting researchers and faculty to achieve compliance.

The loss of the Director of Core Facilities and Shared Instrumentation represents a critical challenge to research excellence at CU. A clear plan should be developed to address this loss so we can support large, complex laboratory facilities. The difficulty in establishing and maintaining large expensive shared instrumentation on campus is affecting our ability to attract and retain top research scientists.

RIO recognizes the increasing role that industry plays in supporting and driving research. Although RIO recognizes that both economic good and public good should be considered, one thing missing from RIO's portfolio of business partnerships is a pipeline for inventions that are intended to be open source and that are not profit motivated, yet still require cooperation from Venture Partners to handle the IP rights. Similarly, there are opportunities to expand the consideration of ethical and public good concerns when establishing industry ventures.

The enormous growth in the size and complexity of grants over the last decade has been accomplished with a much smaller increase (3.5% from 2017 to 2023) in the Office of Contracts and Grants (OCG) staffing. OCG staff has been stretched thin for many years, and this continued increase in workload for an essentially static staff team is not sustainable. Staffing for Research Compliance is similarly modest, which increases the load on researchers and faculty, who are already overtaxed. Maintaining sufficient staff for these activities would seem to be at the core of RIO's mission of supporting Research Development and Research Administration. These activities support the research enterprise of the University, on which all efforts at translating research into impact are predicated.

The self-study notes a high positive response rate to the 2021 Campus Culture Survey, with about 80% of RIO staff respondents giving high marks on questions regarding sense of belonging and respect. However, ARPAC worries that looking at the survey responses on average and as a whole may obscure inequities suffered by members of small minorities. Thus, ARPAC recommends that in this and other evaluations, RIO analyses data for different demographics separately.

RIO has significant opportunities to support DEI goals and needs that could be effectively addressed through their programs that offer faculty, undergraduate, and graduate research support. ARPAC considers that an important first step to furthering support of equity and inclusion would be to monitor the awareness of RIO's multiple initiatives among different populations, as well as the demographics of the people who benefit from these initiatives. This should be done across programs that serve different constituencies, from undergraduate and graduate students to staff and faculty.

Recommendations

To the Unit:

- 1. Prioritize hiring a new full time Director of Core Facilities and Shared Instrumentation with input from faculty involved in the Shared Instrumentation Network. If RIO does not have the needed funding, request funding from the Provost.
- 2. Develop metrics of research impact for laboratories based on research excellence criteria beyond monetizing or commercial engagement.
- 3. Find the ways and means to support professional research management staff for laboratory and computational facilities that are necessary for research excellence.
- 4. Provide RIO with both a base budget to sustain its efforts and a flexible budget, based on a percentage of "F&A"/overhead/indirect costs, that can be used, as grant funding grows, to expand support for research, scholarship, and creative work. Examples include support for OCG, shared and core facilities, and laboratory staffing.
- 5. Create a task force to explore models for funding RIO, drawing examples from other R-1 universities-to help to determine the correct percentage of support for our campus.
- 6. Consider expanding the RIO External Advisory Board to include members who are experts on ethics and the societal impact of new technologies, so that RIO considers these issues when setting priorities and new initiatives. Complete the ongoing revision of the advisory board's charter and organization to ensure that the board receives input from a variety of perspectives, including greater representation from R-1 academia, and to sharpen the focus on research excellence.
- 7. Establish a pipeline in Venture Partners for non-commercial research products, such as open-source software and hardware, to be made available for distribution in a timely manner. Ensure that all intellectual property development is supported by Venture Partners and RIO regardless of its commercial potential.
- 8. Continue monitoring faculty and student awareness and use of RIO programs. ARPAC recommends that these data be analyzed for different demographic groups to ensure the

- climate is supportive of everyone and that initiatives benefit everyone. Continue to refine climate survey data in a similar manner.
- 9. Set diversity, inclusivity and equitability goals for all programs and initiatives led by RIO.
- 10. Help coordinate access to research and creative experiences for undergraduate students, including those who work with grant-funded projects and those who work with UROP, to establish a centralized clearing house for all undergraduates to access research experiences.

4.3 Evaluation Topic #3: Supporting, Sustaining, and Inspiring Our Community (Employee Population)

Topic and Offices

The Academic Futures Report provides recommendations for better community support for faculty, staff, and students including an inclusive culture; affordability; childcare/eldercare; a unified, equitable experience at CU Boulder, including access to, and recognition for, mentoring and professional development activities; common spaces; and open communication between the administration and the rest of campus. In addition, the report identified challenges that are unique to different groups on campus.

This evaluation topic addresses the needs that are specific to faculty and staff. Efforts to strengthen the faculty community should address needs such as the recruitment, development, and retention of a diverse faculty body, including: support for excellent teaching; an assessment of salary inequities; an update of promotion and tenure review criteria to include some measure of "impact" and a clear definition of teaching excellence; and a recognition of the significant contributions of instructors and research faculty by improving their experience on campus, e.g., by offering additional professional development and revising the language of contracts. Resources and support that are important to staff success include: a unified staff experience to help staff members find the information they need; opportunities for development and growth, specifically an improvement in the tuition benefit; career development, including mid-level administration training; recognition for engaging in service activities; and opportunities to make interdepartmental connections.

The Ombuds Office was tasked with leading the analysis in this section of the DAA self-study, but several offices were involved in providing community support for faculty and staff members, including the Center for Teaching and Learning, Continuing Education, Faculty Affairs, the Research and Innovation Office, Academic Resource Management, and the Office of the Registrar.

Achievements

The DAA offices have made significant progress in addressing several key recommendations of the Academic Futures report. Given the important role of specialized track (research and instructor/clinical) faculty to the teaching and research mission of the university, the DAA offices have created and updated policies and procedures for these faculty that relate to promotion, multi-year contracts, and grievance rights. Other achievements include the expansion of programs by the Office of Faculty Affairs to support community-building and professional development for the recruitment and retention of faculty across campus, including those who are not on the tenure-track or who are from diverse backgrounds. Also notable is the increased array of services provided by the Ombuds Office to students, staff, and faculty to promote communication and to create effective relationships in the work environment.

DAA initiatives to address another recommendation of the Academic Futures report, the assessment of salary inequities, have involved collaboration across multiple offices and units to identify and to redress pay inequities in faculty and staff salaries. This exercise, conducted in order to bring the campus in legal compliance with the Colorado Equal Pay for Equal Work Act (CEPEWA), resulted in the adjustment of salaries that were inequitable due to gender and/or race/ethnicity. Notably, it also led to the creation of a new committee, the Faculty Salary Procedures Working Group. The committee, a joint initiative between the Office of the Provost and the Boulder Faculty Assembly, reviewed faculty salary procedures across campus and recommended measures to improve annual merit review procedures and assess salaries for inequities on a regular basis. ARPAC also commends the efforts of the DAA offices in leading efforts to increase promotion raises for tenured/tenure-track (TTT) faculty, which have long been below that of public Association of American Universities (AAU) peers. These improvements in faculty compensation provide much-needed recognition for faculty achievements and contribute to a more equitable culture at CU.

In terms of teaching supports for student and faculty instructors, the ARPAC committee recognizes the contributions of the Center for Teaching and Learning (CTL) in consolidating and developing resources to support teaching excellence for instructors at all levels. These efforts were especially significant during the pandemic, when CTL collaborated with Continuing Education and other offices to provide university-wide support for remote, online, and hybrid teaching to the campus community. The creation of the CTL is the most direct and far-reaching response to Academic Futures recommendations.

External Review Committee Feedback

The External Review Committee (ERC) applauded the efforts of the Ombuds Office in its commitment to improving the campus climate and also praised the work of the Faculty Development and Support team within the Office of Faculty Affairs in supporting faculty development. The ERC noted the need to continue to assess ways to support the career development of specialized track faculty, including defining promotion raises for these faculty. In addition, the committee recommended conducting a salary equity review in order to ensure equitable pay across groups varying in race, ethnicity, and gender. Departments and colleges were also encouraged to continue to support pre-emptive faculty retention efforts.

ARPAC Analysis

ARPAC recognizes the significant support provided by the DAA offices to TTT and specialized track faculty on a variety of levels. In terms of support for staff, many services are provided by the Human Resources department, which reports to the Chief Operating Officer (COO), and which is primarily responsible for meeting the needs specific to staff (e.g., running staff career development, providing training for hybrid and remote work, etc.). The role of the DAA in providing community supports to the staff on campus is less clear: where does their purview fall with respect to staff, e.g., in areas such as staff-faculty relations? For instance, according to the 2021 Campus Culture Survey report, more than 70% of staff respondents agree or strongly agree that they are proud to work at CU and are treated with respect and dignity. However, only 55% of staff survey respondents agree that their work is valued by CU and only 51% of staff survey participants feel that they are treated with respect by faculty, even though 70% of faculty state that they treat staff with respect.

This disparity in perception suggests that improving faculty-staff relations could play a key role in staff job satisfaction and retention, which may well fall within the scope of DAA responsibilities. In particular, providing faculty in leadership positions with training in addressing problematic workplace behaviors may be particularly helpful in establishing respectful and supportive work environments. The Campus Culture Survey report mentions that 49% of all staff survey participants reported experiencing incivility, with much higher rates among those who identify as belonging to marginalized gender, race, and ethnicity groups

(ranging from 58%-67%). Importantly, experiences of incivilities or negative consequences due to incivilities are substantially mitigated when supervisors/department leadership effectively address problematic behaviors. Faculty survey respondents are reported to experience a similarly beneficial effect when senior faculty address uncivil behaviors. The Ombuds Office performs an important role in providing training to improve work relationships and dispute resolution to members of the campus community as does OFA; ARPAC recommends expanded coaching for faculty leaders to improve faculty-staff relations and additional skill-building to address difficult behaviors in the workplace.

ARPAC further notes that the 2018 Report of the Academic Futures Committee recommends that CU regularly perform salary reviews (e.g., every two years) at the college or department level to assess salary. inequities". Both the DAA self-study and the External Review Committee also highlighted the importance of assessing salaries for inequities, in particular, with the aim of redressing pay inequities due to gender or race/ethnicity. Although the DAA, in collaboration with other offices, have established new salaries under the provisions of the Colorado Equal Pay for Equal Work Act (CEPEWA), this was a one-time increase aimed to reduce or eliminate the identified inequities due to gender or race/ethnicity for reasons of legal compliance. It does not address new inequities that may arise not only from conscious or unintentional discrimination but also from other factors such as those identified by the Faculty Salary Procedures Working Group (FSPWG), e.g., retention offers, biased merit criteria, or most importantly, "the insufficient funding of faculty salary increases through regular merit review processes". The DAA plans to make a toolkit available to academic units to assess their own faculty salaries as well as to provide guidance to carry out salary equity reviews. This is a critical first step in identifying inequities within units. However, such an exercise is not meaningful if there are no means to redress identified salary disparities due to insufficient unit pools. Thus, the colleges/schools or university need to provide the financial resources required to meet the salary equity objectives outlined in the Academic Futures report and in line with FSPWG recommendations that the campus administration (i) adequately support unit raise pools so that faculty salaries can be competitive with peer institutions without introducing or reinforcing inequities and (ii) provide resources beyond these raise pools to help units resolve existing salary structure problems using cost-sharing arrangements similar to those used in retentions. The provost's supplemental funds may be a source for addressing these core salary issues.

The self-study mentions the collaborative efforts by the DAA offices in creating faculty retention offer guidelines, which represents significant progress. However, as per the 2022 guidelines, a variety of events could lead to a retention offer ranging from a verbal or written offer of a position at another institution to an intangible risk of recruitment by another institution. In the absence of a uniform set of retention policies, whether or not a faculty member receives a retention offer is subject to potentially arbitrary factors that can prove to be a deterrent to an equitable experience for the faculty community. The committee therefore asks the DAA to consider campus-level policies regarding pre-emptive retention offers for faculty.

ARPAC commends the DAA offices on their efforts to provide recognition for the work of research and instructor/clinical (specialized track) faculty. They note that one of the recommendations of the External Review Committee—defining promotion raises for specialized track faculty—was recently addressed by the provost's approval of a measure to ensure a minimum \$4,000 base-building raise upon promotion to senior instructor (Associate Teaching Professor) and a minimum \$6,500 base-building raise upon promotion to principal instructor (Teaching Professor). The committee asks the DAA to continue professional development and mentoring activities for these faculty and consider new ways to support and sustain their career development.

Finally, childcare/eldercare remains an unresolved problem facing all of our community members. DAA should work towards a sustainable solution.

Recommendations

To the Unit:

- 1. Clarify the responsibilities of DAA in supporting CU Boulder staff:
 - a. given the large percentage of staff that is within academic affairs, DAA should take the necessary steps to support staff-specific needs that are within their purview, including professional development and career growth.
 - b. DAA should address discrepancies in faculty and staff perceptions about the appreciation of the work done by staff and how staff is treated. Given expectations regarding an inclusive and supportive climate for employees, create appropriate programming to train faculty and departmental leaders in how to work with staff.
- 2. Provide specific strategies and timelines to:
 - a. support individual units in conducting annual salary audits to identify pay inequities for regular faculty as recommended by the Faculty Salary Procedures Working Group (FSPWG), e.g., with the help of the Office of Data Analytics.
 - b. develop and implement concrete plans, such as drawing on supplemental funds, for increasing funds available for faculty compensation issues.
 - c. adequately support raise pools and provide additional resources to units to redress pay inequities for faculty as per FSPWG recommendations.
 - d. improve benefits such as tuition support for staff and faculty.
- 3. Provide campus-level policies regarding retentions and pre-emptive retention offers for regular faculty.
- 4. Outline plans to further support and sustain career development for research and clinical/teaching faculty.
- 5. Assess and then meet the need for childcare for the faculty and staff populations. Create a dedicated space for childcare that is convenient, flexible, accessible, and affordable for these populations.

4.4 Evaluation Topic #4: Supporting, Sustaining, and Inspiring Our Community (Undergraduate Student Population)

Topic and Offices

As part of the 2023 self-study, DAA was asked to describe its efforts in "supporting, sustaining and inspiring" the undergraduate student population at CU. The Division of Student Affairs took the lead on this prompt, providing responses concerning 1) the implementation of the 2018 recommendations provided by the Academic Futures Committee, 2) the ways in which COVID-19 has affected the undergraduate mission, 3) what kinds of future steps are needed to continue supporting students, and 4) synergies between Student Affairs and other units addressing other prompts.

Achievements

The response to this topic addresses what Student Affairs—along with the office of Undergraduate Education and the Office of Diversity, Equity and Community Engagement (ODECE)—has achieved in

terms of measuring student success, improving the first-year living and learning experience, creating a sense of belonging for undergraduate students, supporting first-generation students/students from underrepresented racial/ethnic groups, facilitating affordability and basic needs, and improving student communications. The self-study notes a history of "atomized" action among these three units, but also remarks on improvements in communication and coordinated action between them since the last APRAC cycle (linking these improvements to actions taken in response to the challenges presented by the COVID-19 pandemic).

In terms of measuring student success, the self-study comments on improvements in four- and six-year graduation rates over the last decade, as well as the creation of the BUS (Buffs Undergraduate Success) Initiative to monitor progress on these and other fronts. With respect to the first-year living and learning experience, the self-study notes that offices in Academic Affairs have addressed the recommendations made in a 2018, campus-wide effort to assess the first-year experience (i.e., the Foundations of Excellence Initiative). Other specific actions include the lowering of fees for participation in RAPs (Residential Academic Programs), and the creation of a first-year experience advisory board (FYEAB). To create a sense of belonging for undergraduate students, progress appears evident as documented in the 2021 Campus Climate Survey, the implementation of periodic "Buff Chats" between Resident Advisors (RAs) and students, and the advancement of a restorative justice program to help students navigate adverse situations. Additionally, the Center for Inclusion and Social Change (CISC) has been moved under Student Affairs, where it has worked to combine what were previously distinct offices and resources. Likewise, Academic Resource Management, Student Affairs, and the Office of Information Technology have worked together to bring online a campus-wide scheduling platform to help address issues relating to learning and gathering spaces.

In terms of supporting first-generation students/students from underrepresented racial/ethnic groups, ODECE's Precollege Outreach and Engagement Group has continued to deliver programming (despite challenges posed by the COVID-19 pandemic) to students in middle and high schools, while the CISC sponsors the UndocuNetwork (to support DACA and ASSETT) students. To facilitate affordability and basic needs, ODECE provides a number of scholarship opportunities to students from marginalized and underrepresented communities. Further, in 2022 Student Affairs created a Basic Needs Center to help alleviate stresses and to address food insecurity. Finally, to improve student communications, Academic Affairs has worked to deliver more informative, specialized communications to students via the CU Boulder Today bulletins. In addition, in response to Academic Futures' calls for a Unified Student Experience, in 2019 Buff Portal was introduced to replace MyCUInfo's student interface; Buff Info was introduced in 2021 to streamline the delivery of essential campus information to faculty, staff, and students.

External Review Committee Feedback

The external review committee's report on this topic was rather brief. The ERC praised the Buff Undergrad Success-Leadership Implementation Team (BUS-LIT) for its decision-making and communication practices.

The ERC recommended that CU Boulder commit to improving its retention and completion objectives, with the purpose of improving CU's standing among AAU public peer institutions. ARPAC agrees with the ERC's assessment. Despite spending substantial effort over the last decade, CU Boulder continues to compare poorly with its peers.

The ERC also recommended that the campus develop a resource so that prospective students and their families can more quickly access and process essential information about the university.

ARPAC Analysis

ARPAC recognizes the difficulties posed by the COVID-19 pandemic, and appreciates how the different units discussed in the report have responded in supporting our undergraduate student community. In what follows, we respond to the sections of the self-study individually, and follow-up with recommendations.

We use the delineations of the self-study to organize much of our discussion. In the Summary and Conclusions area, we paint a broader view of this prompt while also touching on factors not addressed in the self-study. Supporting graphs can be found in the appendix.

Measuring Student Success

From the discussion provided in the self-study, it's not clear that there is widespread agreement of what defines student success. When ARPAC met with senior leadership charged with driving student success, they were unequivocal in their definition of student success, describing it as a twin-focus on timely progress to completion (graduation rates) and a robust sense of "belonging" among the student body. Despite their conviction, it is not clear to ARPAC that there is widespread acceptance or even awareness of this among all constituents on the campus, nor an appreciation for the fact that the campus has needed work to do in this area.

The self-study is factually correct in its discussion of improvements in overall graduation rates. After over a decade of effort, CU Boulder does report an improved picture of graduation rates. However, as written, the study does not provide the reader an in-depth analysis, nor does it indicate any particular awareness of the true state of affairs with respect to graduation rates on the CU Boulder campus.

Graduation rates on this campus are comparatively low and have been so for decades. Using data from the government's College Scorecard, CU Boulder ranks low among public, AAU peers. The mean for this group in similar-mission peers is 80% compared to 70% for CU Boulder (assuming eight-years to graduation as reported by the U.S. government; see the appendix-Figure 1).

In 2013, under the urging of Provost Moore, meaningful dialogue among campus leadership occurred around the topic of graduation rates, so our low standing reflects the impact of a push that was implemented over a decade ago.

There were real benefits resulting from that push. Prior to that intervention, there had been some improvement over the eight-year period from 2014-2016, and then there was a meaningful 11-point improvement in graduation rates from 2014-2016 (see appendix; Figure 2). However, since 2016 the four-year graduation rate has been flat. The self-study points out the gain throughout this overall period, yet is reticent with respect to the absence of material progress in recent years. Moving from where we are to where CU Boulder aspires, given that the easy work has most likely been accomplished, will be difficult.

As we dig deeper into the data, we see substantial heterogeneity among academic units that campus leadership—as reflected in the self-study report—has not recognized. In particular, the Leeds School of Business and College of Engineering and Applied Sciences (CEAS) have shown greater progress on graduation rates than other units, particularly Arts & Sciences. If we look at Business and CEAS versus all the other colleges, we see that after 2016 Business and CEAS continued to report gains while the rest of the campus regressed a bit (see appendix; Figure 3). Since the gains in Business and CEAS offset the

small decline observed across campus, aggregating all the schools and colleges mask the fact that there has been little progress since the entering class of 2016.

Further, it's important to look within the College of Arts & Sciences (A&S), as overall rates mask real heterogeneity in the data between units (see appendix; Figures 4 and 5). Some units such as Environmental and Evolutionary Biology (EBIO) have made progress, while others such as Mathematics have gone in the wrong direction. Again, some of the largest units in A&S are making meaningful progress, the smaller units show more variability with some appearing to regress over time. It is important to know why some units succeed while others struggle. ARPAC is of the opinion that while the campus seemingly has plenty of data, even at granular levels, there is a general lack of awareness of the data and the story it can tell.

To take a specific example, the self-study argues that the increase in the four-year graduation rate was attributable, at least in part, to the four-year tuition guarantee program introduced in 2018. However, there is no analysis to support this statement. While plausible at a high-level, the heterogeneity observed across colleges and departments surely refutes this thesis. Instead, as best we can tell, the nature of the barriers to timely graduation at CU Boulder appear to be driven by other more fundamental factors controlled at the local unit/department level.

ARPAC is of the opinion that while the campus seemingly has plenty of data, even at granular levels, there is a general lack of awareness of the data and the story it can tell. Moreover, there does not appear to be widespread appreciation for the high degree of heterogeneity observed among academic units. Again, Figures 4 and 5 show the cross-sectional variation evident within the College of Arts and Sciences, the campus' largest college. While the larger units in A&S (in green) appear to be making meaningful progress toward improving graduation rates, smaller units (in red) within the college have lower rates and, in some cases, show much more variability (with some appearing to be regressing over time).

ARPAC also notes that certain populations such as students within the RAP system (see appendix; Figure 6) and the Greek system appear to have a material advantage in graduation rates. There is some reference to this in the self-study report, yet the magnitude of these gains is not well-documented. It was argued that the impressive marginal gains evident from both the RAP experience and engagement with the Greek system could reflect differences in wealth or an engagement effect due to the self-selected nature of these programs. That is a plausible conjecture, worthy of further study. If this proves not to be correct, then we should understand how the gains from these particular experiences might provide models that could benefit all of the campus.

Adverse gaps among certain key student populations are mentioned in the report. Yet, beyond generalizations, there is no analysis about tangible tools and techniques that have been shown to work or a strategic plan to proactively address these challenges. Equally concerning to ARPAC is that among the many programs in place to combat poor graduation rates, there does not seem to be extensive assessment of which efforts are generating meaningful impact.

On the margin, all these various programs seem appealing. Yet they also draw on scarce resources. With no measure efficacy, ARPAC is left wondering if some of these disparate programs are only marginally impactful and should be considered for trimming down, combined with more effective efforts, or dismantled in favor of investments in more effective programs.

ARPAC is unsure of the campus's attitude toward defining and measuring timely progress toward completion. Many discussions of completion rates tout six-year graduation rates. CU Boulder is not alone in this regard as this appears to be common among major U.S. universities. However, the vast majority of all CU Boulder undergraduate degrees is advertised and perceived by the general public as a four-year experience. ARPAC is concerned that six-year graduation rates are being "normalized" by administrators at CU Boulder as a common, acceptable pathway most students and their parents should pursue. ARPAC is concerned that such complacency poses risk on both practical and public relations dimensions. On a practical level, CU Boulder is essentially raising the implicit cost of obtaining a degree by 50% for most students (plus the associated wages lost by being out of the workforce). On a public relations level, this approach easily contributes to a growing and troubling image problem in the U.S. that higher education is increasingly out of touch and not worth the cost.

One promising area of focus for improving four-year graduation rates lies in using information systems to identify students tracking toward becoming "fifth-year seniors." For the entering class of 2017, the graduation rates at year four, five and six are 57%, 73% and 75% respectively. For those not completing in four years, the vast bulk of the students–85%–graduate sometime within the next twelve months. An advanced warning to potential fifth-year seniors might have given them the information they needed to graduate on time. To the extent that the new budget model would direct additional funds to successful colleges, this may be a financially attractive opportunity for low performing units.

The First-Year Living and Learning Experience

The self-study notes that not all of the Frontiers of Excellence (FoE) Initiative's recommendations—including those brought into the Academic Futures report—have been addressed by Academic Affairs as of 2023 (some of these are addressed in the 'Student Centered Learning' section of the self-study). It would be helpful to have a clearer sense of what has been accomplished and what has yet to be tackled.

The self-study also notes that the process of implementing and assessing learning outcomes in the RAPs, Living and Learning Communities, and other First-Year Initiatives is currently underway. However, ARPAC has little sense of how these assessments are being carried out, about the current status of such efforts, or about the heterogeneity in these efforts. ARPAC's conversation with campus leadership suggests that progress has been made on these fronts, and that a considerable amount of useful data is being collected.

A Sense of Belonging for All Undergraduate Students

Although not well-known among various constituencies in the campus community, a sense of "belonging" is part of the dual mandate defining student success on the Boulder campus. This was reinforced by ARPAC's conversations with campus leadership. Clearly, one's work is never fully accomplished in this particular domain. However, compared with the underperformance with respect to timely graduation, the campus should be relatively proud of where is stands with respect to "belongingness."

The self-study does not provide meaningful analytical support or analysis of "belonging." It is not clear that CU Boulder has good time series information to assess progress along this dimension. However, there is some cross-sectional evidence from the Fall 2021 Climate Culture Survey suggesting that the campus is performing acceptably. For example, 91% of student respondents reported being intellectually stimulated, while 87% felt proud to be a CU Boulder student. Overall, 85% of respondents reported they were treated as if they "belonged" at CU, with 59% of the respondents strongly agreeing with that statement. Among respondents, 92% reported feeling they are treated with respect, while 94% agree they are treated with dignity. In remarks made on the 2021 Campus Climate Survey, students

indicate that Fraternity/Sorority life strengthens a sense of belonging. While the self-study does not explore this fact, ARPAC notes that this is an intriguing pattern that deserves additional study.

While no analysis of these climate survey items is provided in the self-study, there is undoubtedly cross-sectional variation in "belongingness." While ARPAC did not have the resources to fully explore this question, the committee did come away with the impression that CU's campus is performing well on the second of its two mandates which constitute "student success." These are subjective judgements, though the data do suggest a wide-spread sense of belonging among respondents.

A pervasive problem was the lack of clear, supporting data. For example, programs like Buff Chats and Restorative Justice are discussed in the self-study, but the extent to which these programs are used by the student body is not clear. Again, a census of "affinity spaces' is underway, but the definition of this term remains ambiguous. We appreciate the self-study's note about "positive responses" to CISC programing, but it is not clear what "positive responses" means in this context.

Supporting First Generation Students and Students from Underrepresented Racial/Ethnic Groups
A key program in this area, the CU LEAD Alliance, receives a rather ambiguous treatment in the self-study, leaving ARPAC unclear about the extent or success of its activities. The discussion ARPAC had with campus leadership did not shed any additional light on the efficacy of this program. This leads the committee to ponder whether this program should be viewed with an eye either to sharply strengthen it or to dismantling it (so that resources can be redirected).

Affordability and Meeting Basic Needs

The self-study provides little discussion of the escalation of tuition and fees at CU Boulder over the last 20 years. Further, outside of some discussion in prompt #13, there is little meaningful discussion of how to address this issue moving forward. Suffice it to say, tuition at CU Boulder has risen substantially over time, easily outpacing inflation.

Specifically, since 2002 tuition on campus has risen on average approximately 8% per year for resident students and 4% per year for non-residents. This compares to the mean growth in the CPI (sans food and energy) of 2.2% per year. The silver lining here is that CU Boulder's tuition growth recorded during the last six years is below that observed for the CPI (which was 3.5% per annum).

These costs have an impact on student attitudes. While nearly 80% of graduates agree with the idea of recommending CU Boulder to a friend considering college, over a third of resident graduating students disagree with the idea that "attending CU Boulder was worth the financial" expense. For non-resident students, this statistic is nearly 50%. CU Boulder is fortunate to be a visible, national program with good applicant flow despite its high out-of-state tuition. However, ARPAC is of the view that the low value students perceive for their tuition dollar should be unsettling to campus leadership.

Relatedly, it is interesting to note that the campus-wide four-year graduation rates for resident and non-resident students entering 2017 are about the same (at 57%). However, after year four we see a sharp divergence. The five-year rate for non-residents falls substantially by seven points relative to residents (68% v. 75%); the gap for the six-year rate widens further (71% v. 79%). This drop-in graduation rates after year four is worthy of further investigation.

One possible reason may relate to the varying tuition structures between resident and non-resident students. For example, suppose a student at the end of year four is only six credits short of degree completion. If they are a resident student in A&S, the student's tuition is scaled by the credit hour and

as such they will need to pay \$2,994 in tuition net of COF to complete their degree. A similar student who is non-resident, though, faces a flat tuition rate not tethered to the credit hours they need. As such, whether they need one hour, or six hours, or eighteen hours to obtain degree completion, they will need to pay \$18,273.

One conjecture is that out-of-state students (who comprise a substantial portion of the CU Boulder student body) facing this scenario at the end of year four simply withdraw and either forego degree completion or obtain completion elsewhere. Either way, this tuition structure combined with CU's budgetary reliance on high, non-resident enrollments may be mechanically biasing downward CU's overall graduation rates relative to its AAU peers.

Again, this is only conjecture, but this tuition structure originally may have been implemented as a tool to generate marginal revenue assuming that non-resident students who were short a few hours would return to campus to complete their degree and pay full tuition. Without further analysis, it is unclear, but by ignoring second-order effects for this flat-tuition policy CU Boulder may be generating negative revenue on the margin along with lower graduation rates.

The self-study offers little discussion of Advancements' initiatives to improve scholarship support, nor is any evidence provided of improvement with need-based scholarship support over time. While other sections of the report lament the low level of state support, little focus is placed on energizing CU Boulder's Advancement team to help tangibly address this challenge.

There is discussion of food security and other basic student needs in the self-study, yet the report provides little compelling evidence or statistics as to where things really stand on this issue or what problems remain There is mention of new programming (which is encouraging), yet little insight is provided relating to impact or improvement over time.

Student Communications

While the development of the Buff Portal and Buff Info resources are discussed in some detail, little is mentioned in the way of virtual options and remote learning resources.

Possible Next Steps

The self-study points to a lack of a coordinated effort toward improving student success. Despite the increased attention and authentic interest in improving graduation rates on campus, the report concludes that the campus' approach at times is counterproductive. The report attributes this in part to the campus' decentralized leadership model. ARPAC agrees with this assessment; it was robustly validated during interviews with campus leadership: they were unified in their assessment that the current decentralized approach is clumsy at best, and would improve with a clear leader focused unambiguously on driving success.

Summary and General Observations

For nearly a decade, student success has been lifted up as an important aspiration. Campus leadership defines "student success" along two dimensions: graduation rates and a sense of "belonging."

ARPAC is not sure that broad awareness around student success—or its definition—exists among the broader CU community, particularly among local administrators, faculty and student-facing staff who work with undergraduates. Moreover, it also appears the broader community is not aware of CU Boulder's relatively poor standing, particularly with respect to graduation rates.

No central actor has responsibility over student success. Despite its stated importance to the Chancellor, the Provost, and other campus leaders, ARPAC remains concerned that the current approach is not working. The current structure to advancing student success is more akin to a confederation of efforts; this results in de facto leadership by committee with no single leader bearing any responsibility on this key issue. As such, it is not that surprising that the self-study mentions that centralizing how student success is driven on this campus may be a welcome improvement. This was also strongly endorsed in conversations we had with campus leadership.

While touched on previously, it is worth reiterating: the improvement observed in graduation rates over the last 10 years is not as flattering as the tone of the report suggests. While many units do show progress, there is wide heterogeneity across units. As such, the extent of timely graduation appears to be idiosyncratic, with highly dependent factors impeding progress in individual academic units. ARPAC is concerned that many academic department chairs may not be attune to the problems around timely graduation posed by their units. Moreover, policy actions by the campus focused on large-scale solutions may be misguided when local results differ widely.

While not mentioned in the self-study, when the ARPAC met with campus leadership it was mentioned that units with high-career placement seemed to do well with timely graduation. This begs the question of whether placing greater emphasis on career placement should become a third pillar when it comes to defining "student success." While robust discussion will undoubtedly ensue with respect to this suggestion, such a stance could bode well for CU Boulder along may dimensions including external corporate engagement, improved alumni relations over time, and more flattering public perception.

Although not mentioned in the self-study, two large-enrollment colleges appear to have made sustained multi-year efforts at dramatically improving four-year graduation rates: Business and Engineering. Comparing the entering classes of 2005 with 2019, Engineering (a college generally perceived as historically having difficulty delivering its undergraduate program within a four-year window) has improved its four-year graduation rate nearly 20 percentage points (from 40.2% to 59.8%). Over the same time period, business improved its four-year graduation rate by 30 percentage points (from 50.0% to 80.3%).

As mentioned elsewhere, ARPAC is of the impression that, while there may be campus-wide impediments toward timely completion (e.g., the non-resident tuition structure mentioned elsewhere), many of these impediments toward timely completion may be rooted at the local, academic unit level. Both Engineering and Business likely have list of successful strategies they have adopted to drive such material and lasting improvement.

Recommendations

To the Unit:

1. ARPAC urges Student Affairs and the other appropriate units in Academic Affairs to make a concerted effort to collect, organize, and analyze data that can address issues about the measurement of student success, the assessment of progress, and overlaps in efforts across campus. From conversations with campus officials, ARPAC is under the impression that data services/support staff are available to meet this challenge, yet the consumers of that data are not enmeshing themselves in the data's policy implications. ARPAC, for what it perceives, is concerned that CU Boulder is not fully utilizing this rich information, and in turn may be falling short of its potential. We recommend that all unit leaders and all individuals within these units become more data aware so as to move forward on the aforementioned issues.

2. After getting a better sense of what programs are working more/less effectively, and what problems have fallen through the cracks, secure needed resources to address student success, whether defined by graduation rates or a sense of belonging.

To the Provost:

- 1. Address the potential adverse effects of decentralized decision-making on graduation rates. While progress on graduation rates has been achieved over the last decade, major parts of the campus have stalled-out during the last four years. If the Chancellor or Provost wish to continue to focus on student success (as defined in part by graduation rates) as a defining strategic imperative for the campus, then ARPAC urges the hiring of a dean-level leader for student success who has the responsibility for overseeing and coordinating more localized efforts. This individual would report to the Provost and have duties such as:
 - Articulating widely amongst all constituencies a clear definition of student success supported by tangible, reportable metrics published periodically over time.
 - Mobilizing attention around this problem of timely student graduation and gaining support for campus-wide efforts to address this problem.
 - Developing and implementing specific, localized plans that engage the different players in the system along with the specific and sometimes local problems they face.
 - Having the authority to interface with key decision makers, including deans and department chairs, to identify roadblocks and hold local units accountable for improvements.
 - Having a total command of the data and using it to identify paths to improve timely graduation rates.
 - Evaluating the efficacy of different programs to improve student success and proposing the dissolution of ineffective mechanisms (and the expansion of effective ones).
 - Driving philanthropic efforts relating to student success.
 - Identifying ways to disseminate useful, real-time information to local academic leaders, and to follow up with them to develop strategic mechanisms to implement progress.
 - Evaluating the progress of student success overall in ten years and, if practical, planning to phase out this role.
 - Reporting annually to the provost on student success and being held accountable for tangible progress.

Absent a central authority, find authentic approaches to address each of the issues articulated above. The current approach of diffuse leadership strikes the ARPAC as very ineffective, particularly in light of the lack of progress in recent years. While the incentive structure in the new budget model shows promise, ARPAC is concerned that progress on graduation rates over the next decade—given the current approach—will not continue, nor compare well with what has been recorded over the last decade.

Without a bold change in its stance toward graduation rates, CU Boulder's relative standing among AAU-publics is likely to remain stagnant for the foreseeable future.

2. Have this clearly identified student-success leader work with CU Advancement to create a menu of specific, comprehensive philanthropic programs, well beyond what is currently done, to address various aspects of student success. Such an approach raises the importance of this issue among all constituencies, including our donor base, and is an avenue for needed financial support. In the name of transparency and accountability, provide periodic progress reports to all constituents on these philanthropic achievements.

- 3. Resolve to better understand the fifth-year senior problem and decrease its prevalence. Increase four-year graduation rates by better disseminating real-time information to local academic units of students who are not making sufficient progress to meet that goal.
- 4. Evaluate the extent to which CU Boulder's tuition structure for out-of-state students short of completion in year four is adversely affecting overall graduation rates and perhaps harming the out-of-state revenue the campus receives. If so, consider revenue-neutral (or enhancing) structural remedies to resolve this situation and the impact it has on graduation rates.
- 5. Have the identified student-success leader substantially increase information flow among all constituencies including administrators, student-facing staff and faculty to make them aware of the graduation rate problem. Consider tools and techniques that other large, complex public- or private-sector organizations have used to drive cultural change and impact through greater informational awareness across the institution.
- 6. Find ways to address the heterogeneity in graduation rates across units. For instance, work with deans and department chairs (who often affect completion rates through their oversight of advising and course availability) and raise awareness as to the financial ramifications of the new budget model.
- 7. Have Engineering and Business share the tools, techniques and policies they've implemented for driving graduation rates over the last decade. Create a team of counselors from these two colleges, or perhaps other well-qualified individuals either inside or outside of CU Boulder, to serve as mentors/advisors to those charged with improving graduation rates in units where material improvement is needed.
- 8. Understand and explore avenues to better leverage the (seemingly) dramatic advantage students who experience either the RAP and/or Greek life have in graduation rates. Look to see how the mechanisms driving these successes can be used to help those not involved in these institutions.
- 9. Substantially upgrade the data capabilities and awareness of those leaders charged with advancing graduation rates. The campus appears to hold a large repository of granular data relating to graduation rates. Nevertheless, while campus leadership shares an expressed desire to make data-informed decisions, it's not clear to ARPAC that there is a broad understanding of the data and its implications. The campus does not appear to be fully leveraging that data to set policy or build specific programs with accountability.
- 10. Implement a process which makes progress toward improving graduation rates as part of the annual merit review mechanism for key campus leadership including senior leaders, deans, department chairs and student-facing staff, including staff engaged in academic advising. In particular, for the identified campus leader tasked with advancing student success, deans), and all department chairs, tie a specific portion (perhaps 20%) of their merit review salary increase to tangible increases in key student success metrics. Further, incorporate success in advancing these metrics as one piece of information relevant for reappointment decisions.

4.5 Evaluation Topic #5: Supporting, Sustaining, and Inspiring Our Community (Graduate Student and Postdoctoral Fellow Population)

Topic and Offices

Multiple DAA offices are involved in supporting graduate students and postdocs. The Graduate School is the primary unit that provides and coordinates services for the graduate student community, with support from the Office of Diversity, Equity and Community Engagement (ODECE); the Office of Career Services; the Center for Teaching & Learning (CTL); Counseling & Psychiatric Services (CAPS); and the Ombuds Office. RIO's Office of Postdoctoral Affairs primarily leads programming and initiatives for postdocs. Many initiatives involve units that provide specific services that contribute to the professional development and well-being of graduate students and postdocs, like the Norlin Writing Center, Health and Wellness Services, and individual academic departments across the university.

Achievements

Since the Academic Future Report was released, the DAA has made substantial efforts to improve financial security, promote a sense of belonging, support mental health, and provide professional development and career training services for a large graduate student and postdoctoral researcher community.

The self-study reports the progress that the DAA has made to address financial stress in the graduate student population. Among other things, the university has made notable increases in graduate student stipends over the past several years, waived graduate student fees, and improved the parental leave policy for graduate students. The report describes intentions to continue to raise salaries to "completely bridge the gap" between graduate student salaries and the cost of living in Boulder. ARPAC appreciates that the University recognizes this as a priority and recognizes that despite notable improvements in recent years, there is still important progress that needs to be made to appropriately compensate our graduate students for their critical role at our university.

In summer 2022, the Graduate School hired a new Faculty Director for Diversity, Equity, Access, and Inclusion to create programming to foster a greater sense of community and to improve academic mentoring specifically for graduate students from underrepresented minorities. In addition, the Graduate School has recently taken over the role of administering the Colorado Diversity Initiative (CDI) thus overseeing programs like SMART and the Colorado Advantage Program, which target CU undergraduates and prospective CU graduate students from minoritized groups with the goal of increasing the recruitment and retention of underrepresented minorities. These efforts have had notable impacts on the number of underrepresented minorities who apply, are admitted, and are enrolled, which has more than doubled over the past decade. The number of PhD's conferred to underrepresented minorities has increased 83% over the same period of time.

The Graduate School partners with the Norlin Writing Center and Health and Wellness Services to offer a variety of programs that build community and promote wellbeing as students progress through graduate school. Some examples of these programs are the Graduate Student Writing Program, Grad+Endurance workshops, mindfulness sessions, and a peer mentoring program. Many of these programs are interdisciplinary, helping students establish community across departments. ARPAC notes that the programs offered vary in size, length, and intensity, thus meeting a variety of needs.

Programming design to support students' needs remained nimble during the pandemic. For example, some of the writing and training programs became remote during the pandemic and have remained remote because attendees prefer that modality. Similarly, in response to postdoctoral fellows' concern

with career progression during the pandemic, the Office of Postdoctoral Affairs increased career development programming. Together with PAC Boulder, a volunteer group of postdocs, they also organize community building events for postdocs and their families.

The University offers a variety of activities to support the career and professional development of graduate students and postdocs. For example, the Office of Career Services within Student Affairs offers individual career advising to graduate students and postdocs and hosts career fairs and networking and information sessions in collaboration with the new Center for Teaching & Learning (CTL) and individual departments. CTL offers certificates and micro credentials in teaching to graduate students and postdocs and has organized the Lead Network, which partners graduate students across different departments with CTL staff to develop discipline-specific programming to support peers.

The University has invested resources to increase the mental health services available to a graduate student population with diverse needs, and these efforts have been largely successful. Surveys have indicated that over 90% of graduate students are aware of the services offered by the university and almost 40% have used these services; wait times are reasonable, and the diversity of services provide options for individual, group, and peer-to-peer support. Counseling and Psychiatric Services (CAPS) has increased graduate student access to mental health support by having a CAPS clinician in Regent that participates in mentoring and support programs that are specifically for graduate students. Critically, CAPS offers resources specifically for underrepresented students, including a Black Identified Students therapist and two multicultural specialists. Postdocs are ineligible for CAPS, and instead get mental health support through the Faculty & Staff Assistance Program.

External Review Committee Feedback

The External Review Committee focused on topics that generally fell outside the recommendations of the Academic Futures report. They appreciated the University's efforts to hold faculty members accountable for poor mentoring practices and encouraged the development of formal procedures for removing faculty from the Graduate Faculty when such action is necessary. They also recommend improving transparency around graduate student retention and time to completion for each degree.

ARPAC Analysis

ARPAC considers the gap between graduate student salaries and the cost of living in Boulder to be the most critical concern addressed in the self-study. The committee appreciates the university's goal to "completely bridge the gap" between the cost-of-living benchmark in Boulder and graduate student stipends; however, stipends are still far (8.8%) below this goal, and the cost-of-living will continue to increase at rates that will be difficult for the university to match at their current pace. Furthermore, even salaries that equal cost-of-living put students in a precarious financial position with little flexibility to cope with unexpected expenses and emergencies, and this stress is often particularly acute for students from underrepresented groups that CU is working particularly hard to recruit and retain. While the university has a few mechanisms for offering some financial support to students facing specific crises, these appear to be poorly advertised and unlikely to help students facing more common, but still challenging, financial stressors that cannot be managed with their current wages. Many postdoctoral salaries are also quite low, and fellows are often underpaid relative to associates within the same units. While CU cannot set the stipend for externally sponsored fellowships, ARPAC encourages the university to examine the discrepancies between fellows and associates through the lens of the Equal Pay for Equal Work Act and to consider options for supplementing the salaries for fellows to ensure they are paid equally to associates within units.

ARPAC recognizes the financial constraints that the graduate school faces. However, if the university does not allocate additional funding to graduate education, the only way to pay graduate students an adequate salary will be to reduce the number of graduate students that the university can train. Capping the graduate student population size based on funding constraints alone would be in direct conflict with the university's goal of expanding undergraduate course offerings—which rely heavily on graduate student teaching support—and its overall mission of being a leading, world-class research institution. The graduate school is in a strong position to lead campus discussions about finding resources to sustain a vibrant and growing graduate student population that is appropriately compensated for their contributions to the university.

Finally, ARPAC was concerned by the discrepancies between the graduate student community's perception of the experiences of students from underrepresented and minoritized groups vs. the lived experiences reported by the students from those groups. As noted in the self-study, these gaps consistently emerge in the GradSERU and Campus Climate data. It is also alarming that over half of respondents who identified as having a disability or being from a historically marginalized racial or ethnic group reported that the climate of their programs was not as good for them as it was for students who did not belong to their group. These data underscore the importance of analyzing the awareness and effectiveness of various programs, including efforts to improve the recruitment, retention and graduation rates for underrepresented minorities, separately for different subsets of the graduate student population. ARPAC encourages the DAA to continue to dissect all of their assessment data in this way to make sure that programs are meeting the needs of students with diverse identities and backgrounds and identify those that would most benefit from additional or different support. Finally, ARPAC strongly supports the DAA's goal to identify and meet the unique needs of graduate students and postdocs who are parents, and especially to improve the availability of childcare facilities and personnel to these and other campus populations.

Recommendations

To the Unit:

- 1. Strive not just to meet, but to exceed the cost of living in Boulder as a salary baseline for graduate students, and continue to seek opportunities to minimize the financial burden our graduate students experience, e.g., by expanding the emergency and crisis funds available and further improving dependent care and leave policies.
- 2. Recognizing the contribution of graduate students to the university's mission of undergraduate education and research, the graduate school needs to lead a campus-wide discussion on increasing the overall resources for graduate education to enable us to sustain or increase the size of graduate programs while providing appropriate compensation for graduate students.
- 3. Carry out a within-discipline analysis of salary compensation for postdoctoral fellows vs. postdoctoral associates. Consider mechanisms for supplementing salaries for postdocs whose wages are limited by external funding guidelines that do not account for the cost of living in Boulder.
- 4. Continue to invest in programs that support community-building and provide mentoring for graduate student and postdoc populations. Track the usage of these programs and assess outcomes to make sure needs are being met and resources are used efficiently. In addition, consider tracking these data for members of different groups separately in case different forms of outreach and/or support are needed to better serve different populations.

- 5. Continue to monitor climate among graduate students and postdocs specifically for members of marginalized groups. When the numbers are small, consider aggregating over different groups with similar patterns of marginalization (e.g., non-binary students with women). In addition to the ERC's recommendation to increase transparency about retention rates and the average time to graduation in different units, ARPAC recommends that these metrics are monitored and reported by subsets of the student population as well.
- 6. Assess—and then meet—the need for childcare for the graduate student and postdoc populations as well as faculty and staff. Create a dedicated space for childcare that is convenient, flexible, accessible, and affordable for these populations.

4.6 Evaluation Topic #6: Inclusive Excellence

Topic and Offices

Inclusive excellence involves concepts of justice, equality, diversity and inclusion (JEDI) as applied to all aspects of excellent campus operations, including administration, service, research and teaching. Both the IDEA plan, adopted in 2019, and the Academic Futures Report identified recommendations to strengthen inclusive excellence on campus. Efforts are ongoing and are organized and implemented across the DAA, but the Office of Diversity, Equity, and Community Engagement (ODECE) has taken the lead. However, as the report indicates, diversity belongs everywhere and therefore the prompt touches a variety of offices and units. A separate vice chancellor for diversity, equity and inclusion has been created, who has the opportunity to coordinate and lead the campus-wide diversity, equity, and inclusion (DEI) efforts.

Achievements

Under the DAA umbrella a wide variety of programs have been initiated that focus on promoting and strengthening DEI efforts on campus. These various programs are targeted to students, staff and faculty. For students, the "JEDI series" created an opportunity to engage with campus leaders on diversity topics, while the Student Affairs office is overseeing a large range of excellent initiatives across the board. For staff and faculty, the initiatives have been focused on implementing the Campus Culture Survey action items and incorporating diversity and inclusion in all aspects of faculty personnel reviews. One particular successful initiative is the Faculty Diversity Action Plan (FDAP), which has been used to great benefit to achieve "critical needs hires"; since FDAP was created, 60% of faculty hires have contributed to diversity. ARPAC is unsure whether the increase in diverse faculty generated by this program is impacting diversity across all its dimensions beyond race and ethnicity. It is not clear whether this highly successful initiative can be extrapolated to hiring of diverse staff and recruiting diverse students in the future. The self-study correctly identifies that "without clear communication, collaboration, and coordination, the efforts of many different units and offices across the University can, while well-intentioned, actually result in confusion...".

External Review Committee Feedback

The External Review Committee identified that ODECE, which is the central unit within DAA in leading diversity efforts, has been undergoing organizational change and therefore is in flux. Furthermore, the FDAP efforts were lauded, but the committee noted that specifics are lacking in publicly available resources. Although clear diversity initiatives are identified for both students and faculty, the staff diversity plans seem to be marginalized. The ERC strongly recommends leadership, vision, and focus from a central campus authority to increase the impact of diversity initiatives across the campus.

ARPAC Analysis

ARPAC noted some duplication, redundancy, and lack of central coordination of diversity initiatives, leading to fragmented efforts that do not reach their full potential. Specifically, ARPAC noticed the need to be both reactive to current affairs by creating stopgaps for urgent issues and strategic and comprehensive in insuring long-term improvements in diversity and equity. A list of impressive programs is not the same thing as a coherent vision. ARPAC is uncertain whether the more efficient approach to diversity is through top-down initiatives, or whether programs are more potent and impactful if they originate from the bottom-up. Although some fantastic work is being done to improve diversity on our campus, there seems to be an observed lack of vision, of focus, and of interconnectivity. We need a balance between central coordination and local innovation.

For example, some (but not all) schools have associate deans for DEI efforts. Are they interacting with each other across schools and with the DEI vice chancellor, or do they just engage and report to their school's own dean? Are there duplications between responsibilities and actions between the provost's and chancellor's offices on DEI efforts? The DEI vice chancellor has a great challenge to lead, guide, and coordinate efforts with DEI associate deans across the school and the campus. ARPAC is particularly concerned whether there is a system for centralized reporting on diversity, especially now that ODECE is restructured, to ensure that all initiatives are implemented evenly and campus-wide. ARPAC also encourages a more pervasive system of accountability. Following upon the decision to make faculty accountable for DEI efforts during personnel reviews, the campus should ensure that leaders such as deans and associate deans are evaluated on their DEI efforts.

A difficult topic to quantify is how DEI efforts are creating actual impact. If DEI programs were lead top-down, it would be easier to coordinate them, to use quantitative data to measure the success of various initiatives, and to find opportunities for connection and coordination. A complication is that to determine quantitative evidence for impact enough time needs to pass in order to get significant statistical data, but a centralized approach is key if we want to be able to achieve this at all.

The impact of the FDAP program seems significant, but specifics and details are vague. For example, how much money is behind FDAP and what is the quantifiable impact on academic faculty diversity in relation to baseline figures at the time of its creation? ARPAC's recommendation is that all faculty hiring efforts should go through an FDAP-like program to enhance the diversity of the faculty. In seeking to increase faculty diversity, the campus should consider using cluster hiring, one proven tactic to increase the diversity.

In addition, ARPAC strongly feels that there is an open challenge to build the institutional infrastructure to allow the hiring and follow-up support of more diverse staff. Staff members are often key connections for students; recruitment of diverse staff should be given the same attention as the recruitment of diverse faculty, and their onboarding and support should be emphasized to ensure that their tenure at the university is not short-lived. Hiring and retaining diverse faculty and staff and recruiting students from diverse backgrounds are, of course, only the first step to secure a diverse campus; campus discrimination and culture problems need to be aggressively addressed to ensure a welcoming environment.

Recommendations

To the Unit:

1. Outline a long-term vision of diversity and inclusive excellence that does not appear to be primarily reactive to news headlines about racial tension. This requires a stronger and deeper formulation of the campus' sustained commitment to DEI as foundational values of how the

university operates. This includes forcefully addressing current instances of discrimination and racism at the university. The initiatives the DAA has undertaken are laudable, but more must be done to integrate DEI seamlessly into the campus institutional and community culture.

- Develop a centralized mechanism of reporting on and judging the impact of diversity and inclusive excellence programs while maintaining localized offices and DEI positions in schools and colleges.
 - a. all academic officers, including the Deans and the Provost, should be held accountable for DEI efforts.
 - b. the Senior Vice-Chancellor for DEI should create a community of practice across all offices of DEI on campus, including all Associate Deans for DEI, to avoid duplication and to promote best practices.
- 3. Build on the FDAP accomplishments by forcefully demonstrating to the campus the positive impact of this program and by providing more financial resources to increase the number of diverse hires of faculty in a shorter period of time. Every unit and faculty search committee should answer the question: was there an equivalent candidate contributing to diversity who could have been selected? Where applicable, cluster hiring is a proven instrument to increase diversity.
- 4. Create an initiative similar to FDAP targeted at recruiting diverse staff members and dedicate financial resources to ensure the success of the program.
- 5. Create and sustain a culture of support that helps with the retention and belonging of students, faculty, and staff and contributes to their well-being throughout their entire time at CU Boulder.

4.7 Evaluation Topic #7: Student-centered Learning

Topic and Offices

The Academic Futures Report identified the first of four projects to be "A Common Student-centered Approach to Learning" at CU Boulder. This project was to be initiated by the articulated Big Idea which involved a "critical examination of conventional ideas of teaching and learning in higher education" and a declaration that CU Boulder is a student-centered campus. The goal of this project was to focus on a common experience for undergraduate teaching and learning, to launch a teaching and learning center, and to unify approaches to advising. As described in the DAA's self-study, the Office of Undergraduate Affairs was tasked to lead this analysis with the expectation that all involved or interested DAA offices would also contribute.

Achievements

Noteworthy recent achievements by the DAA to support and sustain student-centered learning include creating the Center for Teaching and Learning (CTL); increasing opportunities for professional growth; initiating and making substantive progress with CU Boulder's Common Curriculum; communicating the importance of experiential learning and highlighting potential opportunities in undergraduate research as well as involvement in the community; improving processes for students providing feedback regarding their learning experiences; and identifying incentives to support student-centered learning in the new campus budget model.

With respect to student-centered learning, CTL has been the primary driver in supporting innovations in teaching and learning in, for example, large enrollment courses (i.e., the Innovating Large Courses Initiative launched in 2022). Through a combination of workshops and individual consultations, faculty and graduate students have more opportunities to participate in professional learning activities focused on student-centered teaching. In Fall 2023, CTL also launched the Innovation Incubator which engages interdisciplinary teams in course and curricular innovation.

To support undergraduate student academic success and progress towards degree completion, intrauniversity transfer policies have been streamlined and early semester course alerts are now being utilized campus wide. The Office of the Registrar is also working to provide greater transparency with systems that assess course selection alongside ongoing degree-audits so that students and advisors can assess academic progress.

Significant work has been accomplished with the development and dissemination of a Common Curriculum framework for undergraduate education. This framework was shared with all units through a listening tour and revised in Fall 2022 based on feedback from students, staff, faculty, and community members. At present, a faculty curriculum committee is being formed to achieve the goals and learning outcomes articulated in the Common Curriculum.

External Review Committee Feedback

The External Review Committee acknowledged the importance of the work accomplished with developing the Common Curriculum—esp., the common learning outcomes and associated assessments. The ERC encouraged the DAA to continue with this work. In addition, the ERC noted how the exemplary work by the Buff Undergraduate Success (BUS) team is a model for other campus transformational efforts.

The ERC also provided several recommendations to continue the work in student centered learning, including asking colleges to set targets for experiential learning activities and undergraduate research experiences, and to develop assessment tools to support experiential learning and undergraduate research.

With respect to supports for student academic progress, the ERC asked the DAA to consider utilizing Curricular Analytics to inform possible curriculum structure changes that might improve degree completion rates; migrating all 4-year degrees (including Engineering) to 120 credits to improve completion rates; and expanding use of campus-wide early alerts to ensure that all students have actionable feedback (both positive and negative) before the add/drop date for every class.

ARPAC Analysis

The DAA's self-study describes student academic success, as measured by student retention and graduation rates, as a primary goal for this evaluation topic. ARPAC agrees that student academic success is imperative and improvement of the "persistent degree-achievement gap" deserves the full attention of the DAA. The progress of the DAA in streamlining inter-university transfers (IUTs), expanding the use of course alerts, and enhancing transparency in course selection with respect to degree planning and degree audits are noteworthy improvements. However, as the analysis of the prompt on supporting our undergraduate community makes clear, progress in graduation rates is not consistent across campus, which has led to a slowdown in improvements. Further work also needs to be done on IUTS. It is striking that it is more difficult for students to achieve intra-university transfer than to be directly admitted into majors or programs.

The work on the Common Curriculum, and the cross-departmental work to develop common learning objectives, can be a model for ways to share and to disseminate exemplary resources across units that embody principles of student-centered learning. Commitments to these student-centered undergraduate experiences would bolster CU Boulder's reputation regarding student-centered learning. What is not clear is whether the Common Curriculum will spark the kind of "critical examination of conventional ideas of teaching and learning in higher education" that Academic Futures called for. Also, despite the common good that can result from efforts to develop a common curriculum and common learning objectives, we are also aware that top-down curricular and assessment efforts can create tensions and unintended consequences. K-12 education provides a multitude of examples of how institution and system-wide common curriculum and assessment policies can eventually regress towards a test-driven culture that is counter to student-centered learning.

While advising lives at the school/college level, the DAA should set baselines for support and expectations. More work needs to be done to accomplish Academic Future's recommendations on advising.

Recommendations

To the Unit:

- 1. Lead efforts to improve student access to IUTs by encouraging all units to consider unnecessary barriers to student access.
- 2. Building off the effectiveness of course alerts to date, further enhance these early indicator systems by having the Center for Teaching and Learning provide exemplars of early formative assessments that can be used during the first several weeks of a course.
- 3. Develop a unified approach to advising to continue to support student academic success and progress toward graduation. Evaluate advising across campus to ensure all students receive the mentoring, academic counseling, and disciplinary specific support that they need. Secure funding to increase the capacity of advising services so that advisors can reasonably support student decisions regarding academic pathways (i.e., majors, minors, and professional programs) and can thus support timely student progress toward graduation.
- 4. Create mechanisms to ensure that decisions about the assessment of the common curriculum remains with the faculty free from, for example, external political pressures.
- 5. The ARPAC committee reiterates the ERC's recommendation regarding student-centered learning and further recommends that the DAA revisit ways in which active learning instructional practices, experiential learning, and project-based learning can be incentivized and sustained in undergraduate education. Continue to communicate to campus units the value of these student-centered learning experiences.

4.8 Evaluation Topic #8: Interdisciplinarity

Topic and Offices

Academic Futures affirmed interdisciplinarity as a key value in our teaching, researching, and creative work. The 2019 Working Group on Interdisciplinary Education developed the Academic Futures recommendations while further specifying barriers and challenges. Due to the pandemic and other priority projects, DAA has not yet treated interdisciplinary efforts as a top priority. They report that "the

recommendations regarding the interdisciplinary research, teaching, and creative works are still in the starting blocks," and describe the topic as "fertile ground for what is yet to come." The report highlights the centrality of RIO for supporting interdisciplinary research. The work on interdisciplinary teaching seems to cut across DAA, such as the online degree proposal system created by the Office of the Registrar in partnership with the Senior Vice Provost for Academic Planning and Assessment, the Graduate School, and the Office of Data Analytics. As such, fostering interdisciplinarity seems to require collaboration and coordination across DAA.

Achievements

The report takes as given the existing wealth of interdisciplinary activity at CU as documented in the 2019 Working Group Report. Strengthening RIO has been a direct way to strengthen support for interdisciplinary research, particularly funded research connected with outside resources and grants. The Vice Chancellor for Research was given the dual role of Dean of the Institutes, which provides leadership for supporting interdisciplinary research (but not the general oversight recommended in Academic Futures to create a "Vice Chancellor for Interdisciplinary Teaching, Research, and Creative Work and a Dean of Interdisciplinary Faculty"). This interdisciplinary support for research and creative work includes successfully shepherding the institutes as well as projects in the arts, humanities, social sciences, and education. Beyond the work of RIO, the report specifically cites the creation of the College of Media, Communication and Information (CMCI) and the new Common Curriculum as relevant interdisciplinary accomplishments. For interdisciplinary teaching, the DAA has not yet launched a priority effort. Additionally, they offered several ongoing efforts that might be seen as models or pilots that seed future efforts. This includes learning about barriers during the development of now successful programs such as the MS in Data Science.

External Review Committee Feedback

The External Review Committee highlighted on-going interest in The Academies concept from Academic Futures, a topic given only brief mention in the DAA report. They suggested development of more interdisciplinary completion degrees to ensure students with 120 credits can earn a degree. They also recommended continuing to advance support for interdisciplinary activity, including relating it to Common Curriculum priorities on sustainability where possible.

ARPAC Analysis

Freed from the day-to-day constraints of the DAA and other offices working to realize ideas, Academic Futures was a visionary process. It made clear that interdisciplinarity is critical to twenty-first century teaching and research. The Academic Futures report seeks "a university whose structure and processes—including such as budgeting, evaluation, and reward structures—encourage and enable interdisciplinary teaching, research, and creative work by faculty, staff, and students". It did not see interdisciplinarity as only individual accomplishments or programs but a way of re-envisioning the collective work of our community. This vision remains to be achieved.

The DAA self-study begins by recognizing that "the recommendations regarding interdisciplinary research, teaching, and creative works are still in the starting blocks," and that "DAA has not yet launched a priority effort to broaden support for interdisciplinary teaching." By its own estimate, "DAA has not yet moved forward." ARPAC recommends a return to the Academic Futures Report and the 2019 Working Group Report and a move to implement their ideas. CU clearly historically has strong interdisciplinary research, grounded, for example, in the institutes which are a distinctive feature and achievement of this campus. The DAA properly celebrates that history and also lists various ongoing interdisciplinary efforts. What still needs to be done is to make decisions that will be transformative

rather than incremental. Academic Futures can be a guide here. The DAA should in particular look to the big idea, goals, and concrete steps of the Academic Futures Report.

The key recommendation coming out of the implementation committee on interdisciplinarity, which was pursued by a number of working groups, was the creation of interdisciplinary teaching Academies. This offers a structure that could be transformative for education at CU. As with any new project, funding is necessary, but ARPAC feels that this is a case where the investments will pay off, probably in additional revenue as we draw students to cutting edge programs but certainly in an affirmation of the mission and identity of the university.

The 2019 Working Group did an excellent job of mapping obstacles to interdisciplinary work. These obstacles are real and are felt by the faculty every day in both teaching and research. ARPAC asks that the DAA be part of responding to the experiences of these barriers and, while not dictating solutions to local units, helping resolve those barriers.

Since Academic Futures and the 2019 Working Group, a new budget model has been finalized. The DAA self-study notes that listening sessions conducted as part of the budget design process recommend interdisciplinarity be among criteria for *supplemental* funding and also states that the core funds allocation formula will eliminate the need for memoranda of understanding (MOUs). The recommended next step in the self-study includes providing training opportunities on how the new budget model might facilitate interdisciplinary teaching. This highlights a missed opportunity to more fully engage with the Working Group's questions about how a budget might enable interdisciplinarity and which barriers *remain* within the new budget model. In particular, there is still no clear funding model for team teaching.

Someone needs to lead efforts to unlock the interdisciplinary potential of the campus. The report states that "DAA carried out the Academic Future recommendation by giving the Vice Chancellor for Research the dual role of Dean of the Institutes," which seems a very strong success. In discussions with ARPAC, the DAA was reluctant to articulate the Vice Chancellor for Research's authority over interdisciplinarity. As ARPAC understands it, the Vice Chancellor was made a dean for institute faculty, but this is a far cry from the Academic Futures call for a Vice Chancellor for Interdisciplinary Teaching, Research and Creative Work and a Dean of ALL interdisciplinary faculty. Representatives of the DAA in conversation backed away from what the report claims as a major accomplishment, which ends up confusing ARPAC about how the original recommendations are being viewed. The Academic Futures document rightly points out that interdisciplinarity needs a champion with responsibilities for overseeing, coordinating, and supporting interdisciplinarity research, creative work, and teaching across campus. ARPAC endorses this recommendation.

Recommendations

To the Unit:

- 1. Return to the Academic Futures and 2019 Working Group Reports for guidance as to how to develop a strong, goal-oriented approach to leadership, strategy, and accountability for interdisciplinarity. Specifically, look to the big ideas, goals, and concrete steps. In particular find a funding model for the Academies and ensure that the concrete first step from Academic Futures is a central part of DAA efforts on interdisciplinarity; or, if DAA is choosing to not pursue the Academies and other actions regarding interdisciplinarity, state that explicitly.
- 2. Implement the Academic Futures recommendation for the creation of a champion (however designated) for interdisciplinary teaching, research, and creative work.

- 3. Develop a plan for itemizing the obstacles to innovation in interdisciplinary teaching, research, and service still experienced by faculty, staff, and students. Lead local and campus-level resolutions of these problems.
- 4. As suggested as a next step in the self-study, in program reviews conducted by ARPAC examine whether unit guidelines and policies for faculty reappointment, promotion, and tenure adequately credit interdisciplinary research, scholarship, creative work, and teaching. Simultaneously, identify model policies that might be adapted by other units to better reach these goals.
- 5. After identifying and resolving barriers to interdisciplinary education in the new budget model, develop training opportunities on that model to demonstrate to schools, colleges, and departments how interdisciplinary teaching might be fiscally possible and even advantageous. For example, observing that the AF Report asks for help with team teaching, DAA could create a central pool to fund interdisciplinary team teaching, so that both teachers receive in load credit.

4.9 Evaluation Topic #9: Internationalization (Undergraduate Student Population)

Topic and Offices

The DAA self-study points out the significant change of geopolitical circumstances that have impacted international exchange, including both international students seeking to study at CU Boulder and CU Boulder students' engagement with study abroad. The provost tasked the Office of Undergraduate Education to lead this section of the self-study analysis, but the expectation is for other divisions offices to contribute. Three evaluation areas are specified: undergraduate international student recruitment and support; study abroad; and coordination between DAA units and offices.

Achievements

In the wake of the disruption of the pandemic, the International Student and Scholar Services (ISSS) employed a number of technological implementations to ameliorate communications and the relay of information for international students. This included new and revised programs and services through ISSS, such as increased online/remote advising options; online training options; MyISSS portal and eforms website; an electronic alert system; and a post-advising survey. ISSS has also functioned as a first resource for information and strategies for international students caught in the maelstrom of the pandemic and geopolitical instability. Apart from the disruptions of the pandemic, the Office of Undergraduate Education, through the International Student Academic Success Program, offers academic training resources such as "International 101" for first-semester undergraduate students to develop academic skills, build community, and successfully transition to CU. The University also offers English tutoring services for international students to improve English language skills. On the side of faculty and staff, the Center for Teaching and Learning offers workshops for faculty and staff to become aware of the complexities involved in teaching international students, sponsoring workshops on pedagogy and a micro credential for faculty and staff aimed at teaching international students. In terms of CU Boulder undergraduate student participation in internationalization through study abroad, ARPAC also notes the growth of study abroad student percentage from 26.1% in 2018 to 31.6% in 2021. Education Abroad enrollment was increasing before the pandemic and evinced a new uptick after the pandemic. Various institutes and centers at CU Boulder have strongly facilitated internationalization through internship programs, global seminars, and "global intensives." CU Boulder has also made strides towards continued access and inclusion efforts through Education Abroad, offering scholarships and mentorship programs for underrepresented students, such as the CU in D.C. program.

External Review Committee Feedback

The ERC noted that the absence of a senior centralized leader overseeing internationalization has resulted in a diffusion of efforts, with multiple unit directors working outside their job descriptions, leading to a lack of cohesive strategy for internationalization. The ERC also notes that the decentralized structure poses a further challenge for students to navigate. Also, the lack of a centralized coordinating team and the recent loss of a key recruiter may pose problems for recruitment in the future. ARPAC agrees with the ERC that this loss may pose future issues and should be remedied. The DAA's acknowledgement that this position was recently filled may help in working towards the goal of international student recruitment. The ERC also recommends reviewing and defining the level of priority for internationalization and backing up any commitments with appropriate organizational structure, goals and resources. This includes considering a centralized approach and appointing a key leader to coordinate international student recruitment and to structure excellent student support services.

ARPAC Analysis

One of the four projects identified as a prioritized area of concentration by the 2018 Academic Futures report was "Internationalizing our Campus." The report noted that repeated commitment to internationalization had not received appropriate action and recommended prioritizing comprehensive internationalization as an essential key to shape our mission and reach our goals in a globalized world through research, teaching, and service. The foremost recommendation of the Academic Future committee was to appoint a Vice Provost and Associate Vice Chancellor of Education, who was tasked with directing international educational efforts spanning graduate and undergraduate education. On this point, the ERC noted the absence of a centralized structure to advance internationalization leading to a lack of a cohesive strategy. ARPAC agrees with both the Academic Futures report and the ERC on the necessity of an actionable strategy for internationalization. One way of achieving this would be the appointment of an administrative leader as Academic Futures and the ERC both recommend. ARPAC agrees with the need to provide a more centralized administrative structure to appropriately and forcefully approach the complex issues involved in internationalization, but also recognizes other paths to reaching this goal than the one suggested by Academic Futures and the ERC. A steering committee under the leadership of a temporary faculty coordinator could bring together the various campus units involved in internationalization.

ARPAC recognizes that international students coming to CU and CU Boulder students participating in study abroad form two different client categories, which may not beneficially be grouped under a single administrative structure. Further, while the CU in D.C. program is a wonderful and important element of undergraduate study, ARPAC wonders if perhaps this program should be grouped under a different topic. Finally, while the BUS has made significant strides in creating a cohesive undergraduate community as outlined in topics 1 and 4, some of the practices adopted by BUS may offer a model for generating greater community for international undergraduate students in an effort to integrate them into the larger CU community. This could be carried out through the Office of Undergraduate Education or under the direction of a senior leader addressing internationalization.

Finally, ARPAC sees a need to provide information outlining all the different options for Study Abroad and to distribute information on funding and scholarships for Study Abroad options for CU students to the different units and advisors for units across campus.

Recommendations

To the Unit:

- 1. Return to the Academic Futures internationalization plan and make a concrete and actionable plan to back up this commitment.
- 2. Determine the appropriate administrative structure for internationalization. The ERC and Academic Futures recommend an internationalization champion. ARPAC recognizes the complexity of the issues involved here and recommends the appointment of a steering committee and/or the appointment of a temporary (e.g., three-year) faculty advisor/coordinator to sort through the appropriate administrative structures to attain CU's goals.
- Coordinate between different offices and centers and institutes addressing internationalization,
 while recognizing that international students coming to CU and CU Boulder students
 participating in study abroad form two different client categories, and may be more beneficially
 administered independently.
- 4. Formulate a plan to grant more attention to generating genuine integration for international students attending CU.
 - a. draw from the models presented (BUS, for instance) for creating a cohesive undergraduate community and expand these to integrate international students into the larger student community, so that international students do not remain siloed only with other international students sharing their country of origin.
 - b. gather and provide information to campus units on how many international students take advantage of programs, such as tutoring and writing services, and act to increase participation where needed.
 - c. devise a strategy to bolster undergraduate international student recruitment at least to pre-pandemic levels.
- 5. Provide information outlining all the different options for Study Abroad and distribute information on funding and scholarships for Study Abroad options for CU students to the different units and advisors for those units across campus.

4.10 Evaluation Topic #10: Internationalization (Graduate Student Population)

Topic and Offices

The self-study points out the significant change in geopolitical circumstances that have impacted international exchange. The provost tasked the Graduate School to lead this section of the self-study analysis, but the expectation was for other DAA offices to contribute. Two evaluation areas are specified: graduate international student satisfaction, support, and recruitment; and coordination between DAA units and offices.

Achievements

The number of international graduate students has increased 3% since the 2018 Academic Futures Report, and considerable progress has been made in supporting international graduate students in regard to recruitment, community-building, and culture. A recruiter was hired and recruitment efforts through Admissions have resulted in almost a doubling of the number of applications from international

students. Significant efforts have also been made to diversify the graduate student population through targeted recruitment. While the removal of the GRE benefitted those regions that have already made the largest gains in enrollment (India), targeted recruitment efforts have resulted in higher enrollment of students from Latin America, the Middle East, and Southeast Asia. The Associate Vice Chancellor for Enrollment Management created a task force to discuss strategies for recruitment and creating diversity. New academic offerings include three graduate degree programs on Coursera, which have increased internationalization through online degrees. Campus culture surveys have shown a high sense of belonging among international graduate students, but the report also identifies the areas of mental health and visa processes that need further attention. The Graduate School is embarking on a mentoring and advising initiative and collects material for a standardized first-year course experience and orientation. ISSS works to provide social events centered around understanding cultures across the globe, and it supports other partners, such as the Anderson Language and Technology Center (ALTEC) and individual culture clubs on campus, promoting their events. In 2018, the position of Director of International Student Academic Success was created to better support the academic endeavors of international students.

External Review Committee Feedback

In the ERC's evaluation, topics 9 and 10 were merged for internationalization and only one comment specifically addressed the graduate student population. The ERC noted that the percentage of international graduate students has superseded the target at the time of the Academic Futures report.

Other related comments from the ERC included the critique that not having a senior leader overseeing internationalization leads to inefficiency in supporting international students and activities, and that a decentralized structure created additional challenges for students to navigate.

The ERC also recommended that the DAA review and define the level of the priority of internationalization among other areas of concern, and to back up the resulting prioritization with the appropriate organizational structure, goals, and resources. This includes considering a centralized approach and appointing a key leader to coordinate international student recruitment and to structure excellent student support services.

ARPAC Analysis

As has been pointed out in the previous section of this report, ARPAC agrees with the 2018 Academic Futures report and the ERC that "Internationalizing our Campus" should be acknowledged to be a priority by the DAA and backed up with an actionable and concrete plan. This plan does not need to involve creating a permanent administrative position as Academic Futures and the ERC both recommended, but the complexity of the issues involved in internationalization could potentially be better served by instating a steering committee led by a faculty member appointed for a term of three years to coordinate the process of addressing internationalization of the campus on the undergraduate and graduate levels.

ARPAC recognizes the many achievements with respect to the internationalization of the graduate student population but also identified some persistent challenges remaining for international graduate students including: a significant lack of housing and the availability of family housing; limited MA funding; the low admission rate for international students; the lingering impacts of a global recession; lack of partnerships with foreign institutions; and a decline in CU's QS ranking. ARPAC sees particular urgency in the persisting housing needs for international graduate students.

It is a great accomplishment that a recent climate survey has shown international graduate students have a high sense of belonging. To maintain and to further strengthen graduate student climate, we found the idea of a first-year seminar for graduate students quite appealing to offer students an enhanced orientation to the campus and to include them more intentionally in the wider campus community. Often international graduate students are working within one department, and such a seminar could help to build cross-campus connections and community among graduate students. ARPAC discussed appointing a faculty coordinator and tasking them with working with programs and advisors to determine the needs of involved units and to develop a concrete plan to implement such a seminar.

Even though the potential non-domestic student population is diverse in background, interests, and support needs, the specific inquiries and ways to navigate all of the processes from application to matriculation to graduation could be enhanced through centralized communication and resource structures. As noted in the report, a majority of our international graduate students come from India and China with a smaller number from the Middle East. Increasing the diversity of our international graduate population was noted as a key goal, but strategies to move forward on recruiting students from Africa and South America are still lacking. This involves addressing some of the known challenges that units often encounter when receiving applications from candidates from these continents. A major challenge seems to be a lack of detailed knowledge of how to evaluate student applications from these countries with respect to their suitability for graduate studies. ISSS could help in developing strategies to deal with these challenges.

Many of our peer institutions have been successful in attracting donor funds to help support/fund exceptionally talented international students, especially from their international alumni. Developing a specialized effort towards international alumni relations could help in attracting international talent to our campus; identifying successful programs in peer institutions would be a possible first step.

Building international partnerships is not a one-way endeavor, but also involves creating possibilities for international exchanges and improving support for our graduate students and postdoctoral scholars in their pursuit of scholarship, research and/or creative work outside the United States. International partnerships do not need to be built from the ground up. The campus already has a number of established partnerships and exchange programs that are often not used to their full potential. Department level exchange programs for graduate students seem often to under enroll; there are opportunities to develop exchanges across disciplines in order to expand on existing relationships. The language and literature programs on campus all have existing graduate exchange programs that could be potentially built into cross-disciplinary programs with involved universities abroad. A central strategy to build on existing international relations and to create opportunities of exchange across disciplines would be desirable.

Recommendations

To the Unit:

- 1. Return to the Academic Futures internationalization plan and make a concrete and actionable plan to back up this commitment.
- 2. Determine the appropriate administrative structure for internationalization. The ERC and Academic Futures recommend an internationalization czar. ARPAC recognizes the complexity of the issues involved here and recommends the appointment of a steering committee and/or appointment of a temporary (e.g., three year) faculty advisor/coordinator to sort through the appropriate administrative structures to attain CU's goals.

- 3. Pursue a strategy that seeks to simplify access to information regarding recruitment, admissions, and support services for international students.
- 4. Create a first-year graduate seminar for some early adopter schools and colleges. Identify a faculty leader to guide this initiative forward.
- 5. Diversify the international graduate student population by recruiting and retaining students from Africa and South America. Increasing the diversity of this population was noted as a key goal.
- 6. Prioritize seeking additional housing and financial support for international graduate students.
- 7. Survey and initiate discussions with peer institutions regarding how they have developed and sustained their international graduate student populations.
- 8. Building on existing department level exchange programs, create a central strategy for building partnerships with universities in other countries to facilitate exchanges across the disciplines.

4.11 Evaluation Topic #11: Technology and Education/Online and Distance Education

Topic and Offices

ARPAC recognizes the complexity of the issue of technology and education and that this particular prompt entails two separate topics—the use of technology on campus and how the university offers online education reaching beyond campus—that require different strategies of response. The DAA report notes that the university concentrates its efforts toward creating and disseminating asynchronous online credentials and for offering online/distance modes of our existing residential credentials. These courses are offered via the expansion of a portfolio of degrees on the Coursera and Canvas platforms, which are supported by two units, Academic Leaders Institute (ALI) and Continuing Education. For use of faculty more generally, the university offers support through the Office of Information Technology (OIT). The DAA report also points to the development of the Center for Teaching and Learning, as an additional resource for fostering excellence in online education, and ARPAC notes the success of CTL as a resource for the development of a leadership structure for online education and sees the creation of CTL as a major step forward.

Achievements

ARPAC and the campus community heard here and elsewhere in the report recognize the important support offered to units during the pandemic. While technical assistance may not have been uniform across all units, it is clear that for the most part the need the pandemic created for additional technical knowledge on the part of the faculty was met.

In addition, ARPAC acknowledges four achievements within the last few years which stand out:

- 1. The progressive growth of the portfolio of purpose-built academic degrees on Coursera and Canvas. These degrees substantially augment the main campus offerings in new and innovative ways. Further, in the case of the MS-DS, the MS in Organizational Leadership, and others, these degrees represent original and innovative development. ARPAC lauds the excellent work made on this front.
- 2. The development of the CTL as a hub for online practices.

- 3. The creation of the Senior Vice Provost for Online Education, and the reorganization of ALI and Continuing Education under this position.
- 4. The recent development of an Online Action Team.

External Review Committee Feedback

The External Review Committee offered only two comments for technology and online/distance education, with no recommendations. First, they note that the campus has established strategies addressing online learning through both a centralized approach as well as through the different colleges. In conjunction, the ERC notes simply that the supports in place for online and distance learning are appropriate to the university's goals.

ARPAC Analysis

Teaching with technology and creating online degree programs are extremely complex endeavors. Technology is a neutral hardware. Teaching is a profound skill. Program development is a complex activity touching many different branches of the university, from student services, through teaching, to marketing. The Academic Futures Report suggests that the university approach digital education, in terms of both asynchronous offerings and in terms of technological support, in a holistic manner because as we progress in the 21st century, digital education impacts every single instructor and every single student; it impacts retention and student and faculty satisfaction. ARPAC recognizes that technology and education/online education is a broad and difficult area to work in. ARPAC notes that the ERC was largely silent on this key issue. This suggests to the ARPAC committee that online and distance learning are a new frontier not just for CU, but also for other institutions across the country, such that the ERC as well recognizes that standards across institutions have not yet been established. This incipient stage for this new technology might helpfully be embraced by the university as an opportunity to thoughtfully mesh goals with the strategies the university might employ.

The core idea behind Academic Futures' is "Teaching excellence, independent of modality." This was intended to apply specifically across methods of instruction delivery to provide "a comprehensive approach to our efforts in teaching with technology, online, hybrid, and distance education, with the goal of creating a teaching continuum from in-class traditional education to completely online courses and experiences, all with the same expectations, accountability and rewards for educators and students". As in other parts of its report, Academic Futures sought to transform work on campus by pushing for a comprehensive effort on teaching and technology. Academic Futures wanted to be sure that teaching with technology belonged to the schools and colleges and that academic units were responsible for providing an adequate amount of technologically enhanced courses, including asynchronous online classes. Following Academic Futures, ARPAC makes recommendations to nudge the campus toward this comprehensive approach. One particular starting point for the DAA would be to set out a strategy to make the policies, production methods, and incentives for online teaching more uniform across colleges. This would help different units with different abilities and different levels of support to work successfully with technology, to develop or redesign courses, and even to imagine entire new programs.

As the report shows, where the DAA or Continuing Education have stepped in and focused on online program development, specifically in Engineering or in newly created programs such as Organization Leadership, there has been great success. ARPAC suggests that offering funds to incentivize online development and generate relations with external vendor interests may be useful to help some departments build on possibilities for teaching with technology and to make use of different platform capabilities. ARPAC also notes that coordination between support units outside of the DAA and departmental units may benefit from greater communication and coordination between these bodies

such that wholesale changes to technology or course processes do not set back the progress that individual departments have made.

Thus, ARPAC notes the importance of a comprehensive holistic approach overall—a vision—that orients the entire campus from in-class clickers, to distance degrees, to library courses, from faculty needs to staff concerns, and beyond.

Recommendations

To the Unit:

- Return to the vision of holistic excellence stated in Academic Futures and communicate that
 vision broadly and consistently. Reengage the Colleges and Schools in developing a
 comprehensive and holistic vision for teaching with technology and online/distance learning and
 communicate this vision broadly. This would entail a shift from developing a portfolio of specific
 degrees to refocusing on the terms of the 2018 AF report in the vein of the Online Action Teams.
- Define accountability according to a timeline of success. If DAA still thinks that the Academic Futures' recommendations make sense post-pandemic, then build a timeline to meet the AF recommendations. ARPAC recommends that DAA identify comparable and aspirational programs at other institutions, and itemize the steps necessary to achieve its aspirations.
- 3. Focus on DEI/Student Success. This topic appears somewhat buried in the DAA's report, mentioned directly as a subset of the Online Action Teams as one "among the many issues that the Online Action Team is addressing" (100). DEI and Student Success needs to be reframed as central to the DAA mission around teaching and technology.

4.12 Evaluation Topic #12: Faculty Governance

Topic and Offices

DAA's 2023 self-study provides the following introduction on the topic of faculty governance: "Most of the Academic Futures recommendations having to do with faculty governance are the purview of the academic units themselves and of the faculty as a whole." Only at the end of this section after an enumeration of the routine governance activities in the schools and colleges, does the DAA address Academic Futures' innovative recommendation that "[t]he provost and the faculty should convene a task force to create a shared campus-level governance structure that involves the faculty in core decisions while allowing the administration the freedom to carry out those decisions." In the self-study, ARPAC eventually read that "[a]s of the time of writing, the Provost has not taken up the recommendation from the Academic Futures report to convene a task force to examine and explore the creation of a more efficient campus-level shared governance structure." The self-study goes on to speculate that as "governance initiatives ... evolve" in the schools and colleges some mirroring of these may be necessary at the campus level.

The self-study addresses the second evaluation prompt by way of list and description of the various DAA offices and the faculty committees supported by the Office of Faculty Affairs (OFA).

Achievements

DAA's self-study highlights a mandated review of bylaws in the schools and colleges, the restructuring in the College of Arts and Sciences, and within OFA the convening of "an internal Faculty Affairs Advisory

Board (composed of faculty members across all ranks) to share insights and information about faculty life."

External Review Committee Feedback

The ERC reported, briefly, that "Faculty and Shared Governance is strong, and all constituents shared a commitment to effective communication and evidence of engagement was strong," going on to highlight instructional and budgetary matters that perhaps belonged elsewhere in the ERC's report. As has been the case in regard to several other topics, the cursory nature of the ERC's analysis raises the more general question of whether this ERC process functioned as it was intended to work in the context of ARPAC's overall review process.

ARPAC Analysis

ARPAC appreciates the good work that has been done in the schools and colleges in shoring up faculty governance. While ARPAC understands that faculty governance first and foremost involves the faculty, members of the committee see a certain amount of "punting" in DAA's response to the shared governance recommendations. Without campus-level leadership, the schools and colleges will remain siloed in their governance structures, hindering efforts at collaboration, interdisciplinarity, and the streamlining of administrative structures, things the campus claims to value. Some larger schools and colleges may be happy to be left alone when it comes to governance, while smaller units (with much leaner faculty and administrative staff benches) may struggle to make progress. A campus-wide task force may be exactly the right structure to dislodge inertia in certain areas, and we should not discount possible benefits without making the attempt.

Indeed, the DAA's enumeration of the very wide variety of governance structures across the various schools and colleges is itself an implicit acknowledgement of the efficiencies that might be gained by the kind of re-envisioning that could be produced by the task force that Academic Futures recommended grapple with this critical question. As it stands, faculty governance structures across the campus appear to have something of a haphazard quality, that may impede faculty governance in general, given that such heterogeneity may well make it difficult for faculty to understand the governance structures of their own units, let alone of the campus as a whole.

The second evaluation prompt might have led to a more robust explanation of the interconnectedness of DAA offices, structures, and functions, but the descriptive listing received by ARPAC is perhaps indicative of the problem: constituents may not find the organizational structure of DAA easily navigable. At a time when faculty are increasingly raising concerns about salaries and the cost of living in Boulder, the DAA should do all it can to explain its structure and its role in serving the campus, to avoid both the perception and the reality of administrative bloat.

Given such increasingly pervasive concerns, ARPAC believes that the task force recommended by Academic Futures represents a modest and useful step toward addressing those concerns in the context of rationalizing and streamlining faculty governance, both at the unit and the campus level. ARPAC wants to make it clear that this is not in any way a criticism of the Boulder Faculty Assembly (BFA). Indeed, ARPAC understands that the BFA has taken on a more active and productive role in recent years; the committee also understands that relationships between the BFA and the DAA are currently very congenial and cooperative. We believe the task force could build on the current era of good will to strengthen further faculty governance. Again, to be clear, the task force is not imagined as a permanent body or in any way a replacement for current faculty governance structures. Instead it would provide the faculty an opportunity to: (1) insure that, despite structural and procedural variations across campus, the faculty in each school and college has a strong faculty voice on such important matters as

budget decisions; (2) explore barriers to cross-campus solutions that might be resolved through different faculty governance structures; (3) help build stronger connections among the various faculty governance bodies, particularly between each of the school and college groups and the BFA; and (4) consider whether we might create a stronger model of campus-level faculty governance, such as Academic Futures' call to give BFA clear "legislative" authority".

Recommendations

To the Unit:

- 1. Work with BFA to convene the task force called for in the Academic Futures report. The task force would:
 - ensure that, despite structural and procedural variations across campus, the faculty in each school and college has a strong faculty voice on such important matters as budget decisions;
 - b. explore barriers to cross-campus solutions that might be resolved through different faculty governance structures;
 - c. help build stronger connections among the various faculty governance bodies, particularly between each of the school and college groups and the BFA; and
 - d. consider whether we might create a stronger model of campus-level faculty governance.

4.13 Evaluation Topic #13: Campus Physical and Financial Resources

Topic and Offices

As part of the 2023 self-study, the Division of Academic Affairs was asked to "return to the infrastructure and financial planning needs identified by Academic Futures and to reflect on recent developments..." The Office of Academic Resource Management took the lead on this prompt, providing responses concerning: (1) resource prioritization and allocation across the CU Boulder campus (including the roles played by shared governance groups), (2) the description of future steps and plans, and (3) synergies between DAA and other units handling aspects of the financial and physical resources.

Achievements

The answers on this topic address what the DAA has achieved with respect to the Financial Futures initiative, revisions to the campus budget model, the Strategic Facilities Visioning (SFV) initiative, and the Campus Master Plan. The responses also discuss how the DAA has dealt with challenges related to COVID-19, worked to address issues of affordability at both the graduate and undergraduate levels, responded to concerns about faculty compensation, and tackled questions of operational efficiency. The self-study response begins by giving an overview of the campus budget for fiscal year 2023.

With respect to the Financial Futures initiative, the response comments on the breadth of the DAA's efforts beginning in 2018 to incorporate units across campus into the process. The report notes that the listening sessions, townhalls, and other events yielded more than 600 project ideas, ultimately resulting in the implementing of 165 projects. On the topic of the budget model redesign, the self-study remarks on the similarly extensive process through which input on the budget model redesign was gathered: the goal was to revise CU Boulder's longstanding incremental-based budget model, replacing it with a model that would be more flexible and transparent. The new model was implemented in July 2022, and features changes to how schools and colleges at CU Boulder receive net tuition allocations. The response discusses the ways in which the new budget has been designed to support "mission-aligned priorities and values."

In other achievements, the DAA discusses the completion of the Strategic Facilities Visioning initiative starting in 2018, which then informed the 2021 Campus Master Plan. The DAA also comments on the establishment of a strategic capital renewal plan in collaboration with the Office of Budget and Fiscal Planning, the completion of a strategic laboratory infrastructure study, and the efforts to prepare and implement a COVID-19 response for CU via the "Roadmap to Fall 2020."

Finally, on the topics of student affordability and faculty compensation, the report mentions the DAA's actions to reduce residential academic programs (RAP) fees (undergraduate affordability), remit fees for graduate students on appointment, and support the Academic Resource Management Advisory Committee's (ARMAC) recommendations to increase campus raises for newly promoted associate and full professors. In terms of operational efficiency, the DAA response provides examples of efforts to streamline/combine resources (e.g., the new Center for Teaching and Learning), and to create new synergies (e.g., the BUS process) that are aimed "to analyze, prioritize and make resource recommendations for undergraduate student success efforts."

External Review Committee Feedback

As with other topics, the External Review Committee's report on this topic was remarkably brief. The ERC praised university efforts in two areas: (1) for being more financially transparent; and (2) for improving communication flow between enrollment management and colleges and schools, although more improvement is needed in their view.

Further, the ERC called for (1) more coordination with CU colleges and schools to create better cash management guidelines; (2) the formation of a Commitments Tracker as part of CU's new budgeting tools, along with cash-flow management tools; and (3) the creation of a method to hold back some strategic investment funds that can be used for quickly addressing/responding to evolving needs.

ARPAC Analysis

Metrics or Key Performance Indicators: ARPAC recognizes that the DAA has made important local strides in creating data-driven decision-making processes. In particular, the BUS team has demonstrated data prowess that has recently received rave reviews in *Inside Higher Education*. ARPAC did not find the same expertise on display in the report or in the conversations we had with many of the authors of the self-study.

As is true with much of the DAA self-study, this section dealing with finance and physical structure, while making occasional reference to factual data, does not provide robust, numerical analysis supporting either the descriptions in the report or its conclusions. Despite requests in the spring for documented numerical support, ARPAC received little. As such, ARPAC was constrained in its ability to carefully review key questions relating to how resources are flowing and how those flows are evolving over time. Where there is discussion of efficiency gains (e.g., the final paragraph of discussion under the heading "Financial Futures"), there are no metrics/key performance indicators (KPIs) with which to gauge progress. This forces the reader to accept the conclusions of the self-study at face-value, a surprising request for an R-1 institution. As with other aspects of this broader self-study, this prompt leaves the reader wondering, for example, if there is a genuine focus on cost control, and if there is meaningful effort at reigning in overhead. If the campus can reduce costs for necessary but-non-revenue generating support units, this will relieve pressure on the primary funding sources for teaching and scholarship.

The Boulder campus is a remarkably complex organization with distributed leadership. From what ARPAC has ascertained through this review, it is concerned that unit leaders and sub-unit leaders reporting directly or indirectly to the provost and chancellor are not guided by nor evaluated by key

performance metrics which tangibly demonstrate progress in their specific units. Lacking such a culture may be at the root of why progress on so many efforts related to both finance and physical resources as well as so many other areas of high importance to the campus has been so sluggish.

Perhaps the best way to ensure that all resources are being used to maximize the teaching and research missions of the university and to answer concerns voiced elsewhere about a "strong college/weak provost" model would be to reorganize the campus so that the COO reports to the provost and to also develop a rich set of customized metrics and a culture which authentically embraces them.

Loss of Endowment Funds: The self-study refers to the loss at the system level of a significant amount of funds managed by Advancement. As a result, the campus had no choice but to eliminate or defer programs which the dissolved investment funds were destined to support.

The gravity of this loss really cannot be overstated. And yet, the deferral or elimination of expenditures—the only issue addressed in this sub-section—is really not the core issue. Rather, the fundamental issue is around a loss of public confidence in the university's finances. While ARPAC understands that the mistakes made here occurred at the system level, the public does not understand the difference between these administrative levels. The campus must urge the system to reduce or eliminate such failures in the future. It is worth noting that CU Boulder employs faculty who are experts in investment policy, finance, law and accounting and who could help provide oversight.

Incentives and the New Budget Model: Schools and colleges are better incentivized under the recently launched budget model to generate new revenue through course and degree innovation. However, many support units on campus do not, by definition, generate revenue and, in fact, are pure overhead. ARPAC understands that the underlying philosophy of the new budget model asserts that all units contribute to the generation of tuition and other resources; tuition, for example, does not belong to a particular school or college but to our collective effort. While there are incentives for schools and colleges to increase tuition revenue, the document does not speak to any specific mechanism or set of incentives or practices that might lead to cost reductions and efficiency gains in these support units.

ARPAC suggests that the campus undertake cost-benefit analyzes of all existing and new support programs. Well-intentioned programs abound on campus, but we cannot pursue a purely additive approach to support units as we tackle these challenges. More attention needs to be paid to assessing the efficiency of all programs; we need objective metrics to evaluate success, and we need a process whereby to "sunset" support units whose funding could be better used more effectively elsewhere.

Members of ARPAC expressed concern that the current 35% "cut" being taken from tuition for support units diverts resources from the schools and colleges. ARPAC understands that this percentage will be under regular review, and it hopes that this "cut" will not grow over time, thus shrinking funding for the core mission of the campus which is first and foremost performed by the schools and colleges. This concern is amplified by the observation, also cited in prompt #4 (undergraduate success), that since 2002 tuition has risen on average about 8% per year for resident students, and an average of about 4% per year for non-resident students. This compares to mean growth in the CPI (sans food and energy) of 2.2% per year. While ARPAC was not able to evaluate per capital salary data over time, we know that faculty/staff salaries on campus struggle to keep pace with U.S. inflation. Given that overhead is primarily sourced through tuition dollars, this suggests that overhead is increasing at an outsized pace. The fear is that the faculty or the public at large may see this as an example of administrative "bloat." Numerous articles in the trade and popular press cite surveys demonstrating a growing public distain for higher education and rising doubts about the financial payback of an undergraduate degree. Purdue, to

use one example, has pushed back on this unfortunate perception by aggressively holding tuition flat for nearly a decade; they have also used efficiency gains to maintain faculty and staff salaries. CU has tried some similar moves, but the public has not responded with the same confidence.

Providing clear numbers to everyone may help dispel public misconceptions, though we realize how difficult it is to reach everyone with accurate information.

Rollout of the New Budget Model: ARPAC appreciates the process behind the creation and rollout of the new budget model which sought to engage numerous people across campus. ARPAC also realizes that the DAA has tried many different ways to educate the campus and the public about these changes. Those who have worked on designing the model—a large number of people, as noted in the DAA's narrative—seem to have strong familiarity with the model and its nuances. However, it's the clear impression of ARPAC that rank-and-file faculty have little understanding of the new model. Confusion seems, in many cases, to extend further to department chairs and even to deans.

ARPAC perceives that this uncertainty about future resources is creating anxiety throughout the campus. This is tempered, of course, during the hold-harmless years in the near-term, but the out-years are problematic. This is a marketing/PR/awareness problem which must be resolved as soon as possible so that budgetarily threatened units who may not have awareness of their threatened status have the requisite time to innovate course and degree offerings. It is not that the DAA is not trying to communicate; it is that these efforts are not being successful across the board. A new plan is needed to increase the flow of information to the campus in the hopes of reducing this collective anxiety. Of course, if, in fact, the future indicates severe budgetary difficulties, that should be made clear.

Philanthropy: ARPAC is under the impression that the faculty are unaware of the successes achieved by Advancement. Faculty, in general, profess an unfavorable and thus discouraging view of Advancement. However, given the future prospects of state funding, Advancement is most likely the key to our financial future. Since the DAA is itself not a fund-raising unit, it is understandable that awareness of the potential of fund raising is not a major part of the self-study. However, ARPAC urges the DAA to take a leadership role in shaping the work of Advancement.

To move to a specific, ARPAC wants to suggest a broadening approach to Advancement. Advancement pursues support for important goals such as scholarships or buildings or endowed professorships. However, the cost of seemingly ever-growing support units appears to ARPAC to be a problem within the overall budget. A common, unspoken assertion in this subsection of the report is that tuition and/or state appropriations are the only tools with which to finance overhead expenses. ARPAC asks whether there may not be particular parts of the support budget—as examples, disability services, diversity efforts, advising—that might attract philanthropic support. Given the prospects for state funding in the future, the campus needs to look to Advancement as a key tool for funding all aspects of our operations and mission.

To meet this and other needs, ARPAC suggests further investment in Advancement, particularly within the DAA. Evidence from other universities suggests that investments in fundraising can produce significant gains. If, for example, we suppose that the payoff to increased investment in philanthropy is 25:1, a \$1 million investment would yield \$25 million in gifts. Such investments could have a significant impact on a campus that has a history of a comparatively low budget for advancement.

Recommendations

To the Provost:

- 1. Work to provide campus leaders at all levels with the necessary tools and training to make smart decisions based on the best data and an understanding of our qualitative values. Hold administrators accountable for their efforts to increase transparency, including providing the metrics that lie behind particular decisions.
- 2. Inspire every employee within DAA to acquire the rich numeracy skills and data-awareness necessary to improve the performance within their unit. As new employees are added to DAA, assess their numeracy skills and their devotion to data-informed decision making. Rate these skills highly in the eventual hiring decision.
- 3. Ask <u>each</u> unit leader within DAA to develop multiple, objective metrics/KPIs which demonstrate efficacy. Impress upon on each leader the need to use these tangible metrics to objectively identify success and also to identify institutional priorities which need more prompt attention.
- 4. Define merit salary raises for all leaders and their units within DAA such that a meaningful portion of the raise either collectively or individually is determined by progress (or lack of progress) in driving metrics related to their unit or sub-unit.
- 5. Work aggressively with deans, department chairs and DAA unit leaders to better link the campus' overhead needs to Advancement's effort.
- 6. Consider using monies from the supplemental fund to work with units to increase the staff levels for Advancement teams within DAA. Consider perhaps a matching program where the units match some portion of this allocation with their own contribution such that they too have skin in the game.
- 7. Assess unit-level familiarity with the new budgeting process. Implement methods and means to substantially improve familiarity soon, thus providing sufficient time for struggling units to develop new academic programming in time to handle phase-out of the hold-harmless period.
- 8. Identify compelling incentives for leaders of support units to continually identify innovations to reduce cost and improve programmatic efficacy.

To the Chancellor:

- 1. Reorganize the campus organizational chart to have the COO report to the Provost. With academic needs a predominate expenditure within the campus, this will:
 - a. allow better alignment of academic versus overhead expenditures.
 - b. facilitate a more rapid development of metrics that will allow the Chancellor and Provost to project a more fiscally responsible approach to stewardship. Through tangible, fact-based information, unit leaders will be able to more effectively drive major values of the campus.
- 2. In conjunction with the Provost and COO, consider a concerted effort to instill a conscious attitude of stewardship within the CU Boulder campus akin to the efficiency gains evident at Purdue over the last decade by requiring all units and subunits to develop and monitor key metrics that objectively describe progress within their respective areas.

- 3. Beyond the effort already exerted by your office, work with Advancement to develop a well-crafted strategic plan that better links their efforts to philanthropically supporting overhead items, expenditures which currently divert tuition and state appropriations away from teaching and scholarship.
- 4. Develop multiple, objective metrics for CU-Boulder Advancement and its professional staff. Publish and widely disseminate the timeseries of these objective metrics to all constituencies to authentically transmit a tone of transparency and confidence.
- 5. Take concrete steps to strengthen oversight and trust in those charged with overseeing CU's endowment by adding an oversight committee staffed by faculty who possess expertise in law, finance, accounting, and investment policy.
- 6. Evaluate the efficacy of all campus support units, whether within DAA or not, on the basis of objective metrics/KPIs including cost efficiency. Close or reorganize units that do not meet their stated goals within a set time period, e.g., 5-7 years. Such a policy will enhance an atmosphere of good stewardship both within and outside of DAA and will answer, at least in part, concerns about administrative "bloat".

Required Follow-up

The provost overseeing the Division of Academic Affairs (with assistance from the supporting office unit leads) shall submit two follow-up reports—one due on the first of April 2025 and one due on the first of April 2027. The follow-up reports are to be addressed to the chancellor and shall focus on the implementation of the recommendations from ARPAC detailed herein. The chancellor will also respond to all outstanding matters under their purview arising from this review year's recommendations by submitting a follow-up report due on June 1, 2028.

Appendices

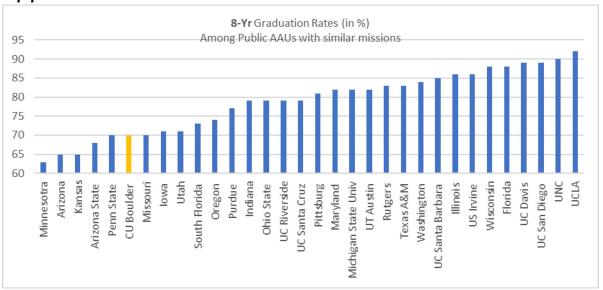


Figure 1

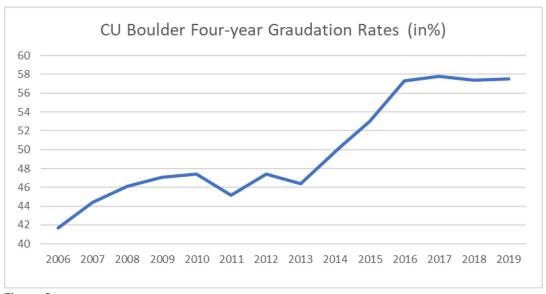


Figure 2

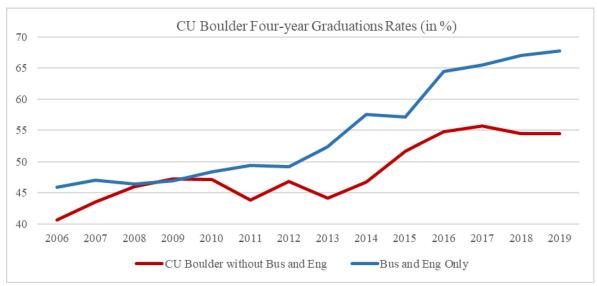


Figure 3

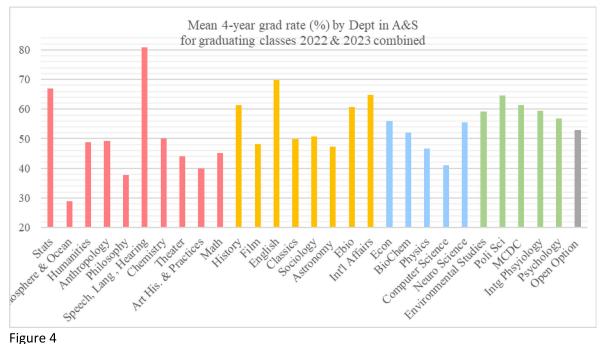


Figure 4

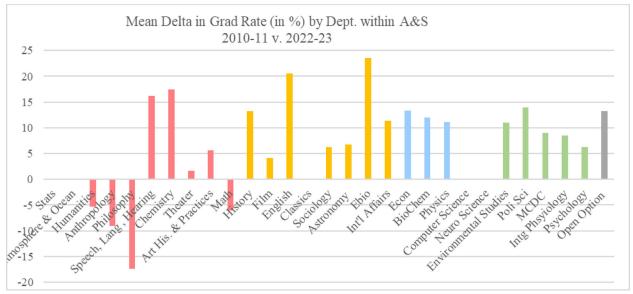


Figure 5

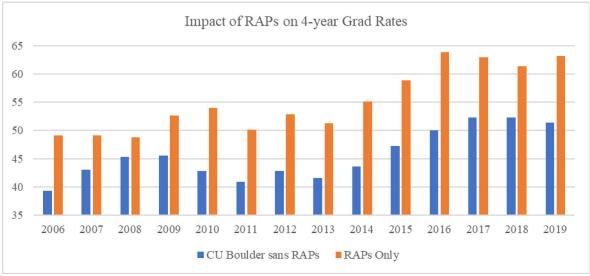


Figure 6