



University of Colorado **Boulder**

2019 Program Review

Program in Environmental Design

Academic Review and Planning
Advisory Committee Report

Approved

DocuSigned by:

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Process Overview

The Academic Review and Planning Advisory Committee (ARPAC) review of the Program in Environmental Design (ENVD) was conducted in accordance with the 2019 program review guidelines. Self-study responses were prepared by the unit and checked by an internal review committee composed of two University of Colorado Boulder (CU Boulder) faculty members outside of the unit. The internal reviewers submitted a summary of findings derived from the self-study and from interviews and/or surveys with ENVD faculty, staff, and student unit members. An external review committee, consisting of two experts from outside CU Boulder, visited the unit and submitted a report based upon review of relevant documents and interviews with ENVD faculty, staff, student unit members, and university administrators. Internal and external reviewer comments and recommendations are shared when relevant throughout this report.

Academic Review and Planning Advisory Committee (ARPAC)

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Academic year 2019-20
voting members

Non-voting members

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Katherine Eggert, Senior Vice Provost and Associate Vice Chancellor for Academic Planning and Assessment and Professor of English

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Scott Adler, Dean of the Graduate School and Professor of Political Science

Staff

Andre Grothe, Office of Faculty Affairs

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Unit Overview

The campus' standardized description of ENVD is available on the website of [the Office of Data Analytics \(ODA\)](#). ODA updates the profile annually in the fall semester. This report cites data posted in October 2018, reflecting the state of the program as of the academic year (AY) 2017-2018.

Disciplinary context

ENVD is a multidisciplinary unit that features education and training in architecture, landscape architecture, planning, and product design. It combines social sciences, engineering, art, psychology, and other disciplines and approaches, focusing on enhancing the built environment. ENVD collaborates closely with the Department of Geography and the Environmental Studies program in the College of Arts and Sciences, and opportunities exist for new collaborations with the ATLAS Institute, the College of Media, Communication and Information (CMCI), and the Departments of Art and Art History, and Theatre and Dance in Arts and Sciences. ENVD faculty members hold licenses and certificates including credentials as professional architects and engineers, as LEED-accredited professionals, and as planners certified by the American Institute of Certified Planners. The ENVD self-study report does not establish the program's relative prominence within the discipline (or disciplines) it covers. At the next review, ARPAC may want to request a list of programs at other universities that are ENVD's parallel or aspirational peers.

Research and scholarship

The research of ENVD faculty and students focuses on community engagement and social needs. ENVD intends to build on its expertise in technology, social science, and community engagement to enhance its standing as a research partner and environmental design community resource. ENVD faculty members conduct research on topics such as how stakeholders collaborate to address social-ecological challenges; the effectiveness of bicycle planning efforts; computer-supported capture, design rationale and related

graphical information management and uses; urban change dynamics and the management of related environmental effects; political engagement in the design profession; and sustainable urban growth. ENVD faculty members have been successful in attaining research support from the National Science Foundation, the United States Forest Service, the Social Science Research Council (i.e., the Drugs, Security and Democracy Fellowship), and the United Kingdom Arts and Humanities Research Council's Partnership for Conflict, Crime and Security Research. ODA's ENVD data show \$507,000 in grant expenditures for the last five years (direct), which ranks ENVD 39th of 61 units overall and 13th of 13 environmental and life science units being reviewed in the current cycle.

The external reviewers expressed several concerns about ENVD faculty members' research interests and productivity. First, the external reviewers believe that ENVD TTT faculty members are not fully leveraging their expertise to take advantage of regional and local issues and opportunities or to create collaborations across other campus units. Second, the external reviewers found that the tenured ENVD faculty members are largely research inactive, while the pre-tenure faculty members are engaged in complex, cutting-edge work addressing modern spatial and cultural issues. The external reviewers expressed concern that the tenured faculty members do not recognize the importance of the work being done by their pre-tenure colleagues, who are in turn uncertain about how their work will be viewed and evaluated by their senior colleagues. Finally, the external reviewers note an imbalance in rank and in sub-field distribution among the tenured faculty members, with a resulting mismatch of faculty expertise to student enrollment in the various tracks within the ENVD program.

Campus
Context

The ENVD unit self-study report describes the unit's evolution in three stages since it was separated from CU Denver in 2011. In

the first stage, tenured faculty lines were transferred to CU Boulder, and the curriculum was reevaluated. An effort was made to create a five-year professional Bachelor of Architecture degree, but the State of Colorado restricts any degree with “architecture” or “planning” in the title to CU Denver. The Boulder campus explored the creation of a school of sustainability that would have included ENVD, but the plan was dropped. During this period of uncertainty CU Denver initiated an undergraduate architecture program, and ENVD enrollment dropped from 900 to 450 undergraduates.

The second stage saw budget cuts, transitions in the instructor-rank faculty from senior instructors to instructors and part-time lecturers, the hiring of three new tenure-track faculty members, and an increase of enrollments to 650 students as of the fall 2018 census.

The Boulder campus’s inability to offer the professional degree option has resulted in an ongoing discussion as to what a bachelor’s degree in ENVD signifies and where the program fits within CU Boulder. During the hire of the new faculty members, the following questions about ENVD’s focus came up:

Is ENVD discipline-focused, a traditional vertical design education, or a horizontal education that focuses on a broad introduction across the design disciplines?

Should ENVD students take a regimented curriculum, or should more flexibility be provided in the curriculum?

Is ENVD an analytical discipline that aligns with departments such as environmental science and engineering?

Is ENVD a social-science discipline that aligns with departments such as sociology and geography?

Is ENVD an applied arts discipline that aligns with units such as Art and Art History and ATLAS?

Another issue that arose during this second phase is the fact that the program has been limited to offering undergraduate degrees. ENVD feels this limitation has served as a barrier to the program's charting its future.

The third stage of evolution since separation from CU Denver began in the summer of 2018 under a new director's leadership. This phase has brought focus to building recognition and reputation and has seen curriculum restructuring, a move toward the introduction of professional and graduate education, and space reimaging and renovation. ENVD plans to create a strategic advisory board to assist in building a professional network that spans designers, public entities, and private organizations that promote and collaborate with the ENVD community. The external reviewers note that ENVD is well positioned to become a broader community resource, contributing a collaborative, interdisciplinary, iterative approach toward addressing future problems.

The external reviewers also list some challenges for ENVD. Among these is its placement as an academic unit within the Graduate School, which creates an unclear supervisory structure and may create the perception that the university does not care about ENVD. The external reviewers also cite identity as an issue for ENVD, noting a lack of a coherent mission both within the program and in its messaging to the outside world.

Faculty members
and
research personnel

According to the AY 2017-2018 ODA ENVD data profile, the unit employs eight tenured and tenure-track faculty members, 13 instructor-track faculty members, 15 lecturers and other instructional personnel, one clinical assistant professor, and

one professional research assistant. The self-study indicates that ENVD had two tenure-track hires in progress in fall 2019. ENVD intends to hire more full-time instructors in order to reduce its reliance on part-time lecturers and puts forward that four instructor lines and one tenure-stream faculty member line are needed in order to reduce reliance on part-time faculty members.

Staff According to the AY 2017-2018 ODA unit data profile, ENVD employs 14 university staff members (previously called “professional exempt”), one classified staff member, and 81 student hourly employees. The self-study report indicates that the ENVD budget is sufficient to support its current staffing requirements.

Undergraduate education

ENVD offers a Bachelor of Environmental Design (BEnvd) with tracks in architecture, landscape architecture, planning, and design studies. ARPAC notes that about half of ENVD students in any given year are enrolled in the architecture track. ENVD also offers an undergraduate minor with three possible tracks—design, history and theory, and planning.

The fall 2017 ODA profile of ENVD shows 611 majors (an 8% five-year decrease), 45 minors, and 87 bachelor’s degrees awarded (a 51% five-year decrease). The decrease followed the split from CU Denver and a resulting student population decline. The number of majors has increased steadily since 2015. Total undergraduate student credit hours amounted to 13,274 (a 4% five-year decrease), with 15% taken by non-majors. ODA profile data show that 17% of student credit hours were taught by tenure-stream faculty members (a 23% five-year decrease), 48% by instructors (a 19% five-year decrease), 11% by teaching assistants and graduate-student instructors, and 25% by lecturers (a 30% five-year increase). ENVD honors enrollment has declined from 44 in 2011-2012 to 17 in 2017-

2018. ENVD believes this decline is likely due to the several years of low program enrollments and smaller graduating classes. In 2017-2018, 3% of ENVD students graduated with honors, which ranks ENVD 24th of 49 units and seventh of eight life and environmental science units in this review cycle.

In terms of student career support, the ENVD Professional Development Services Center matches students with internship opportunities, working to link candidates to firms searching for emerging designers. The center also helps students to develop job search skills and materials such as resumes, portfolios, and cover letters. ENVD also works with the American Institute of Architecture Students and CU Boulder's Community Engagement, Design and Research Center to assist students in finding internship opportunities.

Regarding curriculum, ENVD has prepared a new three-semester core curriculum that launched in fall 2019. The new core curriculum provides students greater exposure to the disciplines within ENVD earlier in the program, enabling them to make better-informed choices about their study focus and making program entrance easier for transfer students. The core curriculum also directs students to take courses in a broad range of liberal arts topics and requires a writing course; it does not, however, require diversity-related coursework. As the core curriculum has been reduced in size from the previous version, students will have five semesters after completing the core curriculum in which to develop a specialization and take advantage of honors courses or study abroad. The redesigned curriculum also offers new tracks in environmental product development and non-studio planning. The non-studio option will help ENVD attract students who want to focus on planning-based coursework and allows ENVD to offer more classes for students in other programs such as Geography and Environmental Studies.

ENVD distributes 16 learning goals derived from corresponding accreditation requirements across its curriculum, and its faculty members review and assess student performance against these learning goals. The program also tracks admission of its graduates to professional programs. The success rate of graduates, the ranking of accepting programs, and the range of programs the students are accepted into are used in evaluating program outcomes.

The internal review committee (IRC) conducted a survey of ENVD students in January 2019. The survey gathered responses from 181 of 722 students (a 25% response rate). Ninety-two percent of respondents were majors and the rest minors. The survey found that 88% of responding ENVD students are overall “satisfied” or “very satisfied” with the program. Students expressed high levels of satisfaction with good treatment, strong staff, and quality faculty member advising. ENVD students gave the sequencing of courses, the availability of both required classes and electives, scholarship support, space, and faculty, staff and advisor professionalism lower ratings. Responses to open-ended prompts revealed concerns about inconsistent rule application, a shortage of research opportunities, a lack of studio space, and insufficient curricular focus on the environment and sustainability. These open-ended responses also noted enthusiasm for the program’s curricular changes, hands-on learning opportunities, and multidisciplinary nature, and for the caring approach of instructors, advisors, and staff. ODA’s spring 2016 survey of seniors, taken before new leadership was put in place, offered mixed results. The program did well in meeting educational goals, satisfaction with the major, and course effectiveness. The results show less satisfaction with opportunities for student and faculty member interactions with job market preparation.

In addition to the surveys, the internal reviewers met with 11 undergraduates representing a variety of ENVD groups (typically all majors and minors would have been invited to this meeting). These students noted a great program community but expressed a number of concerns as well. These concerns centered on space, past leaders' professionalism, advising capabilities and capacities, and intra-program communication and transparency. These communication and transparency problems were reported to have negatively impacted students' sense of inclusion, resulted in non-welcoming/intimidating student interactions with faculty members, and contributed to students' financial stress. The students also showed dissatisfaction with course time availability, vague course expectations, course sequencing, a lack of scholarship funds, and relative time investments in three-credit versus six-credit courses. The external reviewers met with ENVD students in March 2019. The students enumerated program strengths, including opportunities for student leadership, different types of thinking across the curriculum, faculty member diversity, and the value of the staff members. Students would like upgraded Environmental Design Building space including for the second floor to return to ENVD. The students were reportedly unanimous in wishing that the university cared as much for ENVD as it cares for other disciplines such as engineering and business.

ENVD intends to reduce its reliance on faculty members from other campus units for classes that are key to its strategic future. The program hopes to hire a writing instructor to support its writing initiative and an instructor to teach the program's own ecology course rather than relying upon faculty from Environmental Studies.

Graduate
education

The program does not currently offer a graduate curriculum, although a limited number of faculty members oversee PhD

students whose research has an environmental design emphasis. ENVD believes that graduate programs are essential for moving the unit forward and is in the process of developing and proposing a graduate program that includes professional certificates, a professional master's degree, and research master's/PhD programs. These programs would fill demands for new skills and knowledge in the marketplace covering topics including resiliency, energy efficiency, technology advancement, and community engagement. According to the self-study report, the Graduate School is reviewing the proposed programs, although the dean of the Graduate School newly appointed in fall 2019 reported that no such review was taking place. Once approved, the professional certificates and master's degree would likely be ready for launch within one year, with the graduate degree tracks focusing on research ready within two years.

Budget The ENVD self-study report claims that the program's budget of just under \$4 million per year was established to accommodate a 500-student program with 25 faculty members. The budget for staff was higher than average for a program of that size, in recognition of the fact that staff in the program perform both college and departmental functions. With student enrollment now having surpassed 650, the budget is being stressed by the need for additional faculty members. The operating budget of \$1.2 million per year covers such items as computing facilities, student assistants, and marketing. As mentioned previously, the unit profile shows direct grant expenditures for the last five years to be \$507,000, which ranks ENVD 39th of 61 CU Boulder academic units and 13th of 13 units among the environment and life science units. ENVD expects this amount to increase as research gains a greater emphasis in unit culture and in faculty member performance expectations. The ENVD director and the executive committee manage the budget. The program has taken steps to reduce official event spending, recognition

programs, and travel. ENVD anticipates that it will require a budget increase in the next three years in order to meet strategic program needs.

In their interaction with program personnel, the external reviewers received some indications that faculty member salary procedures had historically been inequitable, particularly around gender.

Space
and
infrastructure

ENVD has office, classroom, and laboratory spaces in the Environmental Design Building, located on main campus, as well as in the Center for Innovation and Creativity (CINC), located off-campus on Exposition Drive in Boulder. The program has upgraded Environmental Design Building studio and office spaces and the CINC innovation space.

The 43,183 square feet assigned to ENVD rank the program 22nd among 59 CU Boulder units. Space has been problematic for ENVD since its separation from CU Denver. The loss of the Environmental Design Building's second floor, including lab space there, to ATLAS has damaged program morale and led to tension between ENVD faculty members and campus administrators. ENVD faculty members have also expressed concern about having to pay rent for the CINC space. ENVD asserts that it will need a minimum of four additional faculty member offices, two graduate student offices, and two research lab spaces in order to meet the needs of its new hires and the possibility of gaining graduate students and increased research activities. The internal reviewers noted cramped Environmental Design Building quarters, the lack of material storage spaces, and the high cost, and difficulty of travel to, CINC. The external reviewers note that "Addressing the insufficient amount of space, and in some cases, the inadequate quality of certain spaces, is definitely an area of priority need for the Program."

Governance The program updated its bylaws in 2014 with the intent that they would be revised when ENVD was moved from the Graduate School to another place in the organization. As this reporting line change has not taken place, the program planned to undertake a bylaws review in the fall of 2019. The current ENVD bylaws conform to campus norms with regards to executive structure, voting rights, faculty member hiring procedures, reappointment, promotion and tenure standards and procedures, and standing committees. Annual merit review standards and procedures are incomplete. The self-study report did not include a grievance policy, but ENVD had expected to complete one in the spring of 2019. The internal reviewers found the program's tenure and promotion expectations and processes lacked clarity, noting that the program had not tenured faculty members for some time.

The program director acts as a chief administrative officer and is responsible for program operations. The executive committee, consisting of the program director and two tenure-track and two instructor-track faculty members, establish policy, advise on fiscal affairs, and contribute to the merit review process. The program has established a collective mentoring process that includes all pre-tenured faculty members and at least three tenured faculty members. The internal reviewers suggest that ENVD consider tailoring mentoring to meet needs in each tenure-track faculty member's research area. It does not appear that the program offers mentoring to instructors. The program also lacks formal promotion criteria for instructors.

The external reviewers recommend that ENVD work to equalize faculty member salaries, benefits, and service assignments noting that past hiring and review practices were unclear. The reviewers also recommend course load expectation adjustments to reflect those of external benchmark programs.

Inclusive
excellence

The Program for Environmental Design is working to further the campus diversity and inclusion dialogue and to coordinate its efforts with Office of Diversity, Equity and Community Engagement initiatives. The program approaches diversity and inclusivity at the individual, program and campus levels while advocating for change in the larger design professions. ENVD engages with professional societies' and the student chapter's diversity and inclusion focused efforts, such as Designers Without Borders, which is part of the CU Lead Alliance.

The ENVD self-study does not address its faculty member or student demographic characteristics. The 2017-2018 ODA ENVD unit profile shows that women accounted for 25% of the program's tenure-track faculty members, members of "minority"¹ populations accounted for 50%, and 33% identified as a member of an underrepresented "minority" population. The profile shows that 43% of ENVD undergraduate students identified as women (a 10% five-year increase), 27% as individuals belonging to a "minority" group (a 10% five-year increase) and 20% as belonging to an underrepresented "minority" population (5% five-year increase). The external reviewers report that women are poorly represented among the tenure stream faculty members and suggest that this has contributed to a lower than expected percentage of women ENVD students. ENVD recognizes that a typical design program has a higher women-to-men student ratio. The program intends to focus on recruiting more women students in the coming years.

ARPAC notes that while the ENVD self-study report included vision and mission statements for diversity and inclusivity, it

¹ The word "minority" is in quotes because ARPAC recognizes that the term encompasses people in the global majority; however the source of the data in this report, ODA, uses this demographic category.

appears that it has not yet submitted an inclusive excellence narrative to the Office of Diversity, Equity and Community Engagement.

Climate
and
culture

The internal reviewers' January 2019 undergraduate student survey found a largely positive program climate. Over 88% of the student respondents "agreed" or "strongly agreed" that they were generally satisfied with the program and 93% of student respondents "agreed" or "strongly agreed" that ENVD encourages a climate that is tolerant and respectful of all individuals. In a March 2018 climate assessment managed by ARPAC staff, ENVD faculty member respondents indicated that they are treated with respect by colleagues, staff, and students. However, 30% of respondents "disagreed" or "strongly disagreed" that the program director treated them with respect. A concerning number of respondents "agreed" or "strongly agreed" with the prompt that one or more faculty members say things or behave in ways that humiliate or intimidate other faculty members (46%), staff members (43%), and students (31%). Thirty seven percent of respondents "agreed" or "strongly agreed" that faculty member incivility is having a disruptive effect on program functioning. Thirty one percent "disagreed" or "strongly disagreed" with the statement "I feel like a valued member of the unit" and 31% of respondents "agreed" or "strongly agreed" with the statement "I feel excluded from informal networks in ENVD." The program's self-study report states that "climate is an issue that has plagued ENVD for almost a decade." Responses to an earlier November 2017 campus climate survey showed that ENVD faculty member climate was below the faculty member and system averages in every category except regarding a sense of fair compensation and rewards. Low scores were received in department collaboration, department leadership, and growth opportunities. While ENVD graduate student assistants and staff are generally happier with the unit's climate than the

faculty, those two populations also indicated issues with one or more faculty members saying things or behaving in ways that humiliate or intimidate and with feeling excluded from informal program networks.

Past Reviews

The Program in Environmental Design last went through review in 1991, a proceeding conducted by the Academic Review and Planning Advisory Committee's predecessor group, the Program Review Panel. ENVD was then known as the College of Environmental Design. The review report deemed the decision to separate Environmental Design (Boulder) from Architecture (Denver) to be a mistake and recommended that administrators move forward on one of the following paths:

- A. Assess the feasibility of recreating a unified College of Architecture and Planning encompassing the efforts of both campuses.
- B. Proceed with plans to create a single College of Architecture and Planning with a dean at Denver.
- C. Develop a research-oriented program at Boulder with arrangements with Denver for delivery of professional training.

The report recommended that a search for a new dean be conducted and that the new dean should develop a formal Architecture and Planning PhD proposal to be administered at CU Boulder. The report went on to make the recommendation that "if the search for a new dean does not produce a strong candidate with a clear vision, then the Vice Chancellor should implement one of a number of other options such as closing the College, moving the program to Denver, or maintaining only an undergraduate pre-professional program on the Boulder campus supported by a small number of Boulder faculty, cooperation of Denver faculty (justified by limited transfer of resources to the Denver program), and part-time faculty who are practicing professionals." The report also recommended that the unit develop criteria for judging research excellence and design contribution quality. While ENVD has made progress since the last review, it is clear based on comments from the 2019 self-study report, and internal and external

reviews, that the program's most significant challenge remains a lack of clarity regarding its role within the CU Boulder academic offerings. Faculty member evaluation criteria also remain insufficiently clear, as pointed out by the internal reviewers.

In 2011, a joint-campus program review panel issued a special College of Architecture and Planning report. The report noted that while the graduate programs within the college had been through review for professional re-accreditation and the Denver programs had been included in regular review cycles, the Boulder-based undergraduate program had not undergone program review since 1991. The panel went on to recommend that the program segments located separately in Boulder and Denver, but at the time unified under the CU Denver College of Architecture and Planning's jurisdiction, be administratively separated and placed under the jurisdiction of their respective campuses and that each institution should create distinct programs that reflect the "strengths and missions of the campuses."

Analysis

Strategic vision
and
planning

From 2016 to 2018, the Program in Environmental Design engaged in a strategic planning process aimed at creating a collaborative plan for the program's future and developing actionable goals. This process resulted in four goals:

1. Define and improve educational outcomes and enhance the pool of students seeking admission.
2. Enhance student engagement with the program, faculty members, peers, and community through the development of hands-on student learning experiences.
3. Undertake activities to build a robust environmental design research capability.
4. Identify and support activities that broaden awareness of the unified ENVD vision.

Considering the recent change in program leadership, ARPAC suggests that ENVD renew its intentions and strategic goals around teaching, research, and scholarship for the program's future and address unresolved needs brought up during the review. These include:

- Define the ENVD mission
- Identify peer programs
- Analyze stakeholder needs
- Develop near-term budget and multi-year financial models
- Review enrollment management
- Develop a faculty/staff hiring plan
- Improve communication and transparency

Undergraduate
education

ARPAC supports ENVD's efforts to update its undergraduate curriculum. In future reviews, ARPAC would be interested in an assessment of curriculum changes. The committee would also

be interested in a more detailed learning outcomes assessment, as described above, including information on student placements and on the inclusion of curriculum learning goals specifically related to human diversity. ARPAC encourages ENVD to work with appropriate campus organizations to track these outcomes. ARPAC also encourages ENVD to address problems identified by this review, including with unit communication and transparency, scholarship funding, course expectations, course sequencing, and relative time requirements of three-credit versus six-credit courses. While ARPAC understands ENVD's wish to teach key courses in-house, it also urges the program to avoid redundancy in instruction with other schools and colleges and to make better use of other campus units' instructional resources. One example would be to continue to take advantage of the expertise in writing pedagogy across campus, rather than hiring a new ENVD instructor to focus on writing instruction, thereby allowing for a new instructor to meet pressing curricular needs.

ARPAC also underscores the desire for more research opportunities reported by the internal reviewers and suggests that ENVD incentivize faculty members to include students in research activities. This would help the program meet its goal #2 listed above. allowing for a new instructor to meet pressing curricular needs.

ARPAC also underscores the desire for more research opportunities reported by the internal reviewers and suggests that ENVD incentivize faculty members to include students in research activities. This would help the program meet its goal #2 listed above.

Graduate
education

ARPAC understands that the Graduate School is not considering the Program in Environmental Design's proposal to introduce professional certificate, professional masters, and

research masters/PhD programs. ARPAC agrees that this is not an appropriate time to move forward on these proposals and encourages ENVD to concentrate on improving undergraduate education for now. Before instituting graduate tracks, ENVD and the Graduate School should determine the undergraduate program's optimal size and address possible impacts that graduate programs would have upon staffing, budget, and space. ARPAC would be interested in any plans that ENVD may develop for online courses and services.

Budget ARPAC understands that ENVD's budgetary needs are likely to change if enrollment increases. The committee encourages the program to work with the dean's office to ensure that it is making a convincing case for its resource needs. ARPAC supports the new ENVD director's efforts to emphasize scholarly activities, including to increase extramural research funding. ARPAC encourages ENVD to work with the Office of Advancement on a fundraising plan that would address unit needs.

ARPAC notes that the external reviewers received indications that faculty member salary procedures have been historically inequitable, particularly around gender. ARPAC expects ENVD to investigate this situation and to take corrective steps if warranted.

Space, infrastructure,
and
support needs

As ENVD grows, space is becoming a pressing issue. The internal reviewers note that comments from multiple constituencies emphasized ENVD's cramped quarters, the lack of storage lockers, and the distance and lack of adequate transportation between Main Campus and the Center for Innovation and Creativity. The external reviewers maintain that the space shortfalls constrain operations and inhibit effective teaching in a studio-based learning environment. The external reviewers also point out that ENVD's practice of teaching the

first two years of studio in a “hot desk” model inhibit community building and a co-learning culture. Similar programs use “hot desk” only in the first year. ARPAC recommends that ENVD make a case to the Graduate School for appropriate, contiguous space and that campus planners address the needs of the increasing numbers of ENVD students and faculty and staff members.

Governance

ENVD planned to revise its bylaws in fall 2019. ARPAC asks the program to make sure to review its annual merit standards and procedures and to develop appropriate grievance policies. The program should also develop criteria for promotion from instructor to senior instructor, and from senior instructor to teaching professor. ARPAC expects ENVD to do what it can to clarify the tenure and promotion process for its tenure-track faculty members and to ensure that the process includes research-active faculty members as members of primary unit evaluation committees. As ENVD has taken steps toward hiring instructors instead of temporary lecturers, ARPAC suggests that the program should consider offering an instructor mentoring program. ARPAC also encourages ENVD to take steps to ensure the equitable distribution of salary, teaching assignments, and service responsibilities.

Inclusive
excellence

ENVD is committed to recruiting and retaining individuals who identify as women and/or as members of underrepresented “minority” populations as faculty members and students.

Climate
and
culture

ARPAC supports the program’s proposed steps toward an inclusive teaching and learning environment and recommends that ENVD develop clear strategies for engaging the Graduate School and the campus (including support from the Office of Institutional Equity and Compliance and the Office of Diversity, Equity and Community Engagement) in securing a shared commitment to greater inclusivity.

ENVD is aware of its climate shortcomings and is working to address these by developing a unified program vision that emphasizes collaboration. The internal reviewers note that tenured faculty members show a lack of trust in ENVD decisions. The external reviewers note that the tenure-track faculty members do not feel supported or respected by their senior colleagues and there is tension around teaching allocations and chances to teach in specialty areas. Climate surveys show that there are issues with respect, intimidating or humiliating behaviors, a lack of feeling valued, and exclusion from informal networks. The internal reviewers described a need for improved communication, dialogue, trust, and transparency across all ENVD community segments. ARPAC is encouraged by the new director's steps to address climate issues and encourages ENVD to work with the Office of Faculty Affairs and the Graduate School to improve unit conditions.

Recommendations

The members of the Academic Review and Planning Advisory Committee address the following recommendations to the Environmental Design Program and to the offices of responsible administrators:

To the Unit:

1. Institute a renewed strategic planning process to inform future steps and to manage program growth. Planning targets should include:
 - A well-defined, long-range mission for ENVD teaching, research, and scholarship that provides an overarching focus and purpose for the various sub-disciplines and approaches represented in the unit and that can be communicated succinctly and meaningfully to prospective and current students, to colleagues on and off campus, to the donor community, and to prospective employers of ENVD students.
 - Rational planning around student demand for the architecture track including how student interest affects ENVD's planned identity and faculty member hiring.
 - Identification of peer programs that have the status and contain some or all of the elements that ENVD aspires to.
 - A stakeholder needs analysis.
 - Near term budget modeling and a multi-year year financial model.
 - Studies directed at improvements in enrollment management concentrating on undergraduate education for now.
 - A plan for working with the Dean of the Graduate School on an agreed-upon optimal size for the unit including faculty members and students.
 - A faculty/staff hiring plan designed to meet enrollment and research/scholarly goals, to balance instructor and temporary faculty member hiring, to provide education in

areas of student demand, and to advance ENVD inclusive excellence.

- A plan for improving communication and transparency across the unit.
2. In light of the results of strategic planning, direct mentoring of untenured faculty members toward developing their roles as members of a program with the identity ENVD has planned for itself.
 3. In mentoring untenured faculty members and in assembling PUECs for reappointment, promotion, and tenure, ensure that the development and review of untenured faculty members appropriately reflect current standards in those faculty members' areas of expertise. Consider including research-active faculty members from outside of the program in the tenure and promotion process.
 4. Upon completion of strategic planning and steps toward implementing the plan, make a case to the dean's office and campus administration for an appropriate administrative home for ENVD at CU Boulder, taking into consideration the scholarly, instructional, and budgetary goals of ENVD, the suggestions of the external reviewers, and the alternatives proposed in the ENVD responses to the internal reviewers' report.
 5. Continue laudable recent efforts to improve the climate in the unit, including developing and implementing the means to strengthen a sense of community among program faculty members, staff, and students. Ensure that policies on uncivil behavior are appropriately communicated and enforced.
 6. Develop and implement a concrete plan for recruiting and hiring more faculty members who identify as women or as

members of underrepresented “minority” populations that lives up to CU Boulder’s inclusive excellence standards. In developing this plan, use the services of the Office of Institutional Equity and Compliance, the Office of Diversity, Equity and Community Engagement, and other campus resources. Maximize the retention of less-senior faculty members by a focus on improvements in unit climate and mentoring.

7. In cooperation with the Graduate School, establish and implement guidelines for grievances and for annual merit evaluation that conform to regent law and policy. University rules require that each unit have clear written criteria for annual merit and reappointment as well as a grievance policy.
8. Develop clear written criteria for promotion from instructor to senior instructor, and senior instructor to teaching professor.
9. Incentivize ENVD faculty members to include undergraduate students in their research.
10. Develop and implement plans for the equitable distribution of salary, teaching assignments, and faculty member service responsibilities.
11. Complete and submit an inclusive excellence narrative to the Office of Diversity, Equity and Community Engagement as soon as possible.
12. Partner with the Office of Advancement on a fundraising plan to address needs such as increased undergraduate student scholarships and space improvements. Leverage strategic planning to identify the most urgent needs.

13. Work with the dean of the Graduate School and the Executive Vice Provost for Academic Resource Management on short-term and long-term space shortfall solutions. Make a case for securing long term contiguous space.
14. Ensure instructors who are doing significant service are rewarded appropriately in annual merit review and in review for promotion within the instructor track.
15. Upon completion of strategic planning and after having made progress on the above-mentioned issues, make a case with the Graduate School for developing professional certificates, professional masters, and/or research masters/PhD programs.
16. Support ENVD in its quest to better position itself within the CU Boulder administrative structure.
17. Support ENVD in improving the climate for faculty and staff members and students. Ensure that policies on uncivil behavior are appropriately communicated and enforced.
18. Support ENVD through the strategic planning process.
19. Review course proposals to ensure they do not contribute to redundancy with other schools and colleges and make best use of instructor resources that might be available through other schools and colleges.
20. Work with ENVD and the Office of Advancement to put together a fundraising plan predicated on ENVD strategic planning goals.
21. Work with ENVD on short-term and long-term space shortfall solutions.

To the Dean of the
Graduate School:

22. Consider ENVD requests to introduce graduate programs.

To the Executive Vice
Provost for Academic
Resource Management:

23. Support ENVD in its quest to better position itself within the CU Boulder administrative structure, moving from within the Graduate School to a more appropriate school or college.

24. Work with ENVD on short-term and long-term space shortfall solutions.

25. Work to consolidate ENVD studio space if possible, and to recommend solutions for the appropriate use of current ENVD space.

To the Vice Chancellor for
Infrastructure and
Sustainability:

26. Improve and regularize accessible transportation between campus and the Center for Innovation and Creativity.

To the Provost:

27. Support ENVD in its quest to better position itself within the CU Boulder administrative structure.

Required Follow-Up

The director of the Program in Environmental Design shall report annually on the first of April for a period of three years following the year of the receipt of this report (i.e., April 1st of 2022, 2023, and 2024) to the dean of the Graduate School and to the provost on the implementation of these recommendations. Likewise, the dean of the Graduate School shall report annually on the first of May to the provost on the implementation of recommendations addressed to the program. The provost, as part of the review reforms, has agreed to respond annually to all outstanding matters under their purview arising from this review year. All official responses will be posted online.