The CCAS ADVANCE Initiative Promoting Institutional Transformation through a National Deans' Association

Engaging deans and department chairs—key individuals who play pivotal roles in the recruitment, mentoring, development, and advancement of STEM faculty—will cultivate academic leaders who are more knowledgeable about STEM gender equity issues, more able and motivated to address those issues, and thus better positioned to effect positive transformational change in their own colleges and departments.

The <u>Council of Colleges of Arts and Sciences (CCAS)</u> is the focus of a \$1.2 million grant from the National Science Foundation as part of NSF's <u>ADVANCE</u> program to "develop systemic approaches to increase the representation and advancement of women in academic science, technology, engineering, and mathematics (STEM) careers." The award funds a project from August 2009 through August 2013 under the subcategory of ADVANCE grants entitled Partnerships for Adaptation, Implementation and Dissemination (PAID). The project aims to adapt best practices from other ADVANCE grantees to infuse STEM gender equity content into CCAS's well-established and self-supporting professional development programs. CCAS's main partner in this adaptation effort is the University of Washington's Leadership Excellence for Academic Diversity (LEAD) program. The CCAS ADVANCE Initiative involves an innovative and multi-tiered approach of transforming an association of academic administrators as a means of promoting change among CCAS member institutions.

The objectives of the CCAS ADVANCE Initiative are to:

- 1) infuse gender equity content and activities into CCAS's professional development programs in a sustainable way;
- 2) maximize opportunities for positive impacts of the initiative on individuals underrepresented in STEM disciplines; and
- 3) develop, utilize, and make widely available a set of robust case studies that incorporate gender equity elements.

The Issue

A great deal of attention has been paid to addressing the underrepresentation of female faculty members in the sciences, some of it incentivized through the provision of federal funding. Despite such efforts and the increasing numbers of doctorally-prepared women in STEM fields, the presence of women on the STEM faculty remains disproportionately low.

In her book, *The Science Glass Ceiling: Academic Women Scientists and the Struggle to Succeed*, Sue Rosser (2004) provides an overview of National Science Foundation (NSF) programs that have aimed to support women scientists and facilitate their retention and



advancement in the academy. She chronicles a shifting philosophy, reflected in both scholarly research and federal funding priorities, that began with efforts focused on "solutions for the individual," including programs for professional development and mentoring. While such efforts have had some positive impacts, the female-focused intervention model implies that women are somehow inadequate and in need of "fixing," a perspective that is at odds with their retention and success. As described by Rosser, continuing research on the underrepresentation of women among STEM faculty, as well as institutional self-studies such as the one conducted at MIT in the late 1990s, has led to the conclusion that there exist systemic barriers in the academy that contribute to the attrition of women, barriers that require transformation of institutions rather than individuals. Accordingly, programs like NSF's ADVANCE have been implemented to facilitate institutional transformation.

Why CCAS

The Council of Colleges of Arts and Sciences (CCAS) is a national association of baccalaureate degree-granting colleges of arts and sciences whose purpose is to sustain the arts and sciences as a leading influence in American higher education. CCAS, a network of deans, serves as a forum for the exchange of ideas and information among deans of arts and sciences representing the member colleges and as a representative of the liberal arts and sciences at a national policy-making level.

The CCAS ADVANCE Initiative extends what has been primarily an institution-based approach to addressing the underrepresentation of STEM women faculty to one focused on a higher education association of academic administrators. Academic leaders are critical to addressing many issues that affect the retention and advancement of STEM women faculty, and academic deans are key players in this regard. For example, deans are instrumental in: shaping, implementing, and enforcing their colleges' policies and procedures, including those for faculty recruitment, retention, evaluation, and advancement; diversifying the faculty; implementing planning and priority-setting for their colleges; establishing the culture of and climate in their colleges; and selecting and providing leadership development for their college's chairs. As the nation's largest organization of arts and sciences deans, CCAS is in a unique position to reach this population.

CCAS's informal motto is "Deans helping deans to dean," and a key component of our mission is to provide professional and leadership development for arts and sciences deans. As a service to our membership, CCAS also supports professional development for arts and sciences department chairs. The organization has a robust and well-established professional development infrastructure, which includes multiple workshops and the CCAS Annual Meeting. These programs provide a natural place for the inclusion of information about gender equity, and they have the benefit of providing a sustainable process for educating leaders about Initiative goals.

Our Partners

Leadership for the CCAS ADVANCE Initiative is provided by the project leadership team, a CCAS ADVANCE Standing Committee that includes the Executive Director and selected Board members, and an External Advisory Board consisting of individuals with particular expertise in STEM gender equity and faculty work-life issues. CCAS partners in the Initiative include the following:



University of Northern Colorado

As the home institution for Denise Battles, the project's Principal Investigator and Dean of the College of Natural and Health Sciences, and Lucinda Huffaker, the project's Program/Research Manager, the University of Northern Colorado is where much of the day-to-day work of the Initiative is carried out. Lucinda acts as liaison with the other partners in the project.

Eastern Connecticut State University

Carmen Cid, Dean of Arts and Sciences at Eastern Connecticut State University, is the grant Co-Principal Investigator and member of the CCAS's Board of Director. She is part of the project leadership team and sits on the CCAS ADVANCE Standing Committee.

University of Washington Center for Workforce Development

UW's Center for Workforce Development (CWD), which has assessed a number of other ADVANCE projects, serves as assessment and evaluation consultant for this Initiative. Suzanne G. Brainard, Ph.D., is responsible for the overall direction and management of the evaluation, and Priti Mody-Pan manages the day-to-day evaluation efforts, including development of the survey instruments, interview protocols, data analysis, interviewing and report writing.

University of Washington Leadership Excellence for Academic Diversity (LEAD)

LEAD is an established ADVANCE program of documented efficacy whose program shares much similarity with CCAS programs, including format, delivery methods, and target audiences. While the concept of professional development workshops for department chairs and deans is not new, the LEAD workshop has been distinctive in its focus on the transformation of academic climate and culture by equipping participants with the gender equity knowledge and skills to effect positive change. LEAD personnel Eve Riskin and Joyce Yen are serving as advisors and consultants for the adaptation of LEAD materials into the CCAS setting.

Project Plan

Goal 1. Infusion of gender equity content and activities into CCAS professional development (PD) programs

The primary focus for the integration of gender equity content is the New Deans' and Department Chairs' Seminars. LEAD workshop components that have been tentatively identified for adaptation into the seminars include: faculty recruitment; faculty mentoring; communication skills; and implicit bias. These topics are highly relevant to CCAS's audience of deans and chairs, representing skills and knowledge that are critically important for these individuals to successfully recruit and support the advancement of women in STEM. The implicit bias session will be a particularly important element in CCAS's adaptation. It is based on the Implicit Association Test, or IAT (Greenwald et al., 1998), an interactive tool that allows users to personally experience the powerful and pervasive effects of unconscious bias, heightening their awareness of and ability to counteract it. LEAD personnel are helping us develop ways of introducing or augmenting gender equity content in the planning materials and resources used in CCAS seminars.

Other CCAS PD programs will also be targeted for integration of STEM gender equity topics, including the topical seminars and CCAS's pre- and post-conference workshops. As well, the



project team will explore the development and offering of a new pre-/post-conference workshop on STEM gender equity issues.

Goal 2. Maximizing project impacts on individuals underrepresented in STEM

Deans and chairs from minority serving institutions generally oversee a high proportion of faculty from underrepresented populations. Thus, facilitating positive institutional change at minority serving institutions through the CCAS ADVANCE Initiative will impact disproportionately high numbers of underrepresented faculty members. Increasing these administrators' participation in CCAS professional development programs will positively impact their own professional growth and development and enhance the programs' diversity in terms of institutional type and racial and ethnic diversity of participants. Therefore, it is anticipated that increased diversity among seminar participants will yield a richer learning environment while supporting the success of deans and chairs from minority serving institutions through networking and professional development.

Five out of the 40 total available seats in each New Deans' and Chairs' Seminars are targeted for participants from minority serving institutions. This opportunity is available to deans with oversight of STEM disciplines and STEM department chairs, whose participation is encouraged through waiver of registration fees and provision of funds to offset travel costs.

Goal 3. Development and implementation of case studies

Case studies are an important part of the LEAD workshops as well as CCAS professional development programs where they are used in seminars and are a favorite session at the Annual Meeting. The case study method allows participants to understand complex phenomena like those contributing to the marginalization of underrepresented groups in the academy and still retain the authentic contexts recognizable as real life situations. The scenario-based learning design establishes a framework for discussion and debate among participants. Problem-solving with peers facilitates the sharing of best practices and strategies, enabling administrators to implement transformational change at the departmental and institutional level.

In that case study analysis is integrated throughout CCAS programming, an excellent opportunity exists to use cases as a means of introducing STEM gender equity content. A goal of the CCAS ADVANCE Initiative is the development and implementation of six to ten case studies consistent with CCAS's "style" and that will address gender equity scenarios commonly encountered by STEM deans and department chairs. Likely scenarios will address faculty recruitment and search committee dynamics; mentoring of pre-tenure, mid-career, and late-career faculty; faculty evaluation; leadership development; and conflict management. A user's guide for facilitators will also be created for each case. The case studies will be used in CCAS programs featuring case study analysis and made available through posting on the CCAS website.

Conclusion

We are enthusiastic about the potential of the CCAS ADVANCE Initiative to create a significant difference for STEM women in CCAS institutions. Please explore the CCAS web site for additional information about the project, resources on gender equity in the STEM disciplines,



and ways to get involved. We also welcome your questions and suggestions. Please refer to the Contact page for addresses.

References

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