## $\overline{\text { INIAPLU }}$ INCLUDES

## A Guidebook for a Campus Self-Assessment of Successes and Challenges in STEM Faculty Diversity and Inclusion

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## INTRODUCTION

Campuses across the country are engaged in critical conversations about limited progress made in boosting faculty diversity, most notably in the STEM fields. While many institutions have good intentions and have articulated a commitment to improving the representation of faculty from underrepresented and underserved communities in STEM departments and campus-wide, commitments to diversity and the implementation of programming have not translated to meaningful demographic changes in the STEM professoriate nationally. In recent decades, women have made up an increasing proportion of science and engineering PhDs , representing over $40 \%$ of all degree recipients. Yet they continue to hold less than $30 \%$ of all STEM faculty positions and are particularly underrepresented among full-time faculty and full professors (NSF, 2008). Progress on racial and ethnic diversity also continues to be a struggle. Despite gains in enrollment and completion in graduate degrees, Black, Latinx, and Native American scientists enter the professoriate in small numbers. In 2015, over $70 \%$ of science and engineering professors were White, almost 20\% were Asian, Native Hawaiian, or Pacific Islanders, $4.8 \%$ were Latinx, $3.5 \%$ were Black, and less than $1 \%$ were Native American (NSF, 2018).

The NSF-funded Association of Public and Land-grant Universities' (APLU) INCLUDES project aims to address these issues directly. The INCLUDES grant is focused on expanding the diversity and presence of underrepresented populations in the STEM professoriate. The project aims to facilitate change on a national scale through a collaborative, evidence-based approach. More specifically, INCLUDES aims to provide APLU's public university and university system members with strategies to better understand their challenges and implement promising practices to broaden participation in STEM programs, foster career pathways toward the professoriate, and tools to effectively recruit, hire, and retain STEM faculty from underrepresented groups. To learn more about findings from the APLU INCLUDES project, read our report: Strengthening the Pathways to Faculty Careers in STEM: Recommendations for Systemic Change to Support Underrepresented Groups.

This Guidebook is an outgrowth of the work under APLU's INCLUDES grant, which among other achievements, led to the development of the Institutional Model for Increasing Faculty Diversity (referred to throughout this document as "the Model"). The Model offers a framework to promote a broader understanding of what is required for effectively hiring, retaining, and promoting the success of underrepresented STEM faculty. Based on this Model, we developed the Institutional Self-Assessment for Inclusive Faculty Recruitment, Hiring, \& Retention Tools to help campuses evaluate the actions they were taking institution-wide to diversify their STEM faculty, as well as provide information that could serve as the basis for the construction of a plan for expanding diversity and inclusion on their campus.

The primary purpose of this Guidebook is to serve as a resource for campuses and colleagues who choose to engage in the Institutional Self-Assessment process. The Guidebook provides:

1. A summary of the scholarship and practice-based insights leveraged to develop the Institutional Model for Increasing Faculty Diversity and Institutional Self-Assessment Tool
2. Instructions on how to complete the Campus Self-Assessment Tool
3. Practical guidance for campuses as they develop action plans for advancing faculty diversity and addressing challenges and barriers revealed by the Campus Self-Assessment Tool

## GROUNDING FRAMEWORK: THE INSTITUTIONAL MODEL FOR INCREASING FACULTY DIVERSITY

The structure of and questions included in the Self-Assessment Tool are grounded in the Institutional Model for Increasing Faculty Diversity. The Model is a conceptual framework, offering a way to understand the multiple factors and forces impacting faculty diversity at the institutional, college, and departmental levels (Griffin, 2020). The Model starts with a simple question: what are the components that a campus must address to enable an effective STEM faculty hiring and retention system that increases representation among underrepresented groups?

The initial development of the Institutional Model for Increasing Faculty Diversity was informed by a comprehensive review of the scholarly literature on the nature of faculty work, faculty recruitment and retention strategies, and the experiences of underrepresented populations in the academy. Consistent with the collective impact approach undergirding the APLU INCLUDES project (see Kania \& Kramer, 2011), we went beyond extant research and the expertise of the APLU team to answer this question and develop the Model. The Model and the Self-Assessment Tool went through multiple rounds of revision during meetings with our eight-member Faculty Diversity Task Force (composed of leading scholars in higher education, university presidents, and senior administrators), attendees at the APLU INCLUDES Summit in the spring of 2017 and 2018, and various stakeholders (faculty, administrators, and leaders of organizations that have attempted to increase faculty diversity and implement programs and policies to reach these goals). To explore the feasibility and helpfulness of the self-assessment tool, 11 APLU institutions engaged in a paper review which involved examining the narrative questionnaire and data template and providing feedback to the Faculty Diversity Task Force. Five institutions piloted the self-assessment tool, offered detailed feedback on the questions, structure, and whether the instruments met their needs and provided helpful insight into the current state of their campus and efforts to promote diversity and inclusion in the academy. The inaugural cohort of the Aspire Alliance IChange Network further tested the Tool by completing the self-assessment as a prelude to action planning. Thus, dimensions of the model and questions included in the self-assessment tool are based on knowledge gleaned from scholarship, practice, and experience.

While the Model and subsequent Self-Assessment Tool were developed based on the evidence available in the field, we are aware of continuing studies and practices that can enhance our understanding of the most effective strategies to increase faculty diversity. For example, COACHE and the University of California system partnered to pioneer a faculty retention and exit survey that is shedding more light on how campuses should approach counter offers and foster institutional retention. In presenting the sections below describing and supporting the components of the Model, we also acknowledge that there is much work that still needs to be done to clarify what strategies will be the most efficient and efficacious in supporting inclusion and diversity in the STEM professoriate.

The Institutional Model for Increasing Faculty Diversity (appearing in Figure 1) offers institutions a complex, multidimensional framework to understand the factors and forces that impact institutions' abilities to recruit and retain a diverse faculty body in the sciences. The Model suggests that to increase faculty diversity in meaningful ways, campuses must implement comprehensive programs, policies, and strategies that address four core areas:

- Institutional context, or the overarching commitment and investment the campus has made in promoting diversity and inclusion;
- Faculty recruitment, or short- and long-term efforts to bring faculty from diverse backgrounds to campus;
- Transition, or the process by which faculty are welcomed and incorporated into campus communities between their hiring and formal initiation of employment;
- Retention, or efforts focused on promoting faculty success and satisfaction that keep them at the institution.

While we discuss and describe these dimensions separately, they do not work in isolation. Rather, it is important to note and assess how increasing the critical mass of faculty from diverse backgrounds on campus through various recruitment strategies may create a critical mass and increase sense of belonging, which can have an impact on retention. Comprehensive programs promoting successful transitions to the campus community and access to professional support and development may make it easier to recruit potential new hires eager to enter environments offering these forms of support. Thus, rather than instituting compartmentalized programs that exist in silos across the institution, we highly recommend collaborative efforts to not only understand the forces that impact faculty diversity, but also to develop interrelated interventions to attract and retain scholars from underrepresented backgrounds.

## Institutional Context

Institutional context refers to the overall environment in which faculty diversity is addressed and a set of institutional or university-wide factors relevant to whether and how the university has articulated and enacted a commitment to diversity and inclusion. While this initiative focuses on efforts to increase diversity in the STEM professoriate and focuses on work in science departments and programs, progress requires attention to the larger institutional context and campus climate, and the attitudes, beliefs, behaviors, and perceptions of community members as they engage across differences.

Scholars suggest that meaningful progress on issues of diversity and inclusion cannot be siloed in one office or be the responsibility of a few select individuals; rather, progress requires senior-level administrators to make a visible and vocal commitment to holistic engagement across the campus. This can come in the form of appointing a chief diversity officer, including commitments to diversity and inclusion in institutional mission statements and strategic plans, and both assessing and developing strategies to address campus climate issues. Therefore, within this dimension, we consider questions like: Are diversity and inclusion addressed in core university documents, and is there a chief diversity officer in the central administration? What is the commitment by the administration and board of trustees to diversity and inclusion, and have there been recent climate surveys, and if so what has the impact been?

## Recruitment

Recruitment refers to efforts to attract and hire a diverse faculty body. A great deal of public discourse, scholarly work, and media attention has been focused on addressing faculty diversity through increasing the number of individuals from underrepresented backgrounds pursuing PhDs, thereby increasing the size of the potential applicant pool. Yet it is important to remember that increasing the number of applicants from underrepresented backgrounds when faculty positions are posted is not the only (or most effective) strategy for increasing faculty diversity. Recruitment is not one activity; it is a multistage process that involves generating interest in faculty careers, encouraging people to apply for positions, successfully navigating a selection process, and ultimately getting someone to accept an offer. Thus, this dimension is divided into three sub dimensions: outreach, hiring, and yield.

Outreach. Outreach focuses on long-term efforts to build pools of candidates for available faculty positions. While many campuses may wait until there is a specific position open to cultivate a pool of candidates, we note the importance of developing more global outreach plans, as campuses and specific departments and programs develop relationships with potential candidates in systematic ways, introducing
them to the institution and potential opportunities.
Hiring. Hiring addresses all efforts related to cultivating an applicant pool and candidate selection for a specific open position. Many institutions have focused efforts in this area, attending to the construction of the position announcements, advertising, and how the behaviors of search committees influence who applies, is invited to campus, and ultimately offered a faculty position. We affirm the need for diverse pools of applicants and finalists, as well as a commitment to a hiring process where inclusion is valued, and bias addressed, to increase the rate at which individuals from underrepresented groups are hired into faculty positions.

Yield. Yield reminds that while a campus can make strides in making offers to a more diverse pool of candidates, it is not guaranteed that those offers will be accepted. Little attention has been focused on learning about what leads to a candidate accepting or declining an offer, and it can be enlightening to have a record of the campus/program's yield performance over time, with particular attention to successes and failures to hire faculty from diverse backgrounds.

## Transition

Once a successful candidate has been hired, there may be several months before the person actually begins their new faculty position. We refer to this time period as the "transition phase," and see it as an opportunity to build connections, begin socializing the person into the campus culture and community, and begin the process of professional development. While many campuses offer orientation programs for new faculty, this appears to be an underexplored area for intervention.

## Retention

While many campuses place a lot of emphasis on recruitment generally, and hiring in particular, it is equally important to attend to whether professors are being retained or remain at the institution or in academia. It is not uncommon for campus representatives to discuss their great fortune in hiring a very promising underrepresented faculty member, but lament that the person departed three or four years later. Some describe a "revolving door" when it comes to faculty from underrepresented backgrounds, noting that new hires who are women or are men of color are often are replacing a woman or man of color who just left the institution. We encourage institutions to consider their retention programs and policies in their faculty diversity and inclusion strategies, focusing specifically on three components: professional development, advancement, and satisfaction and support.

Professional Development. Professional development focuses on providing training and guidance that supports skill development and opportunities that help faculty reach the highest levels of success in their jobs. We encourage equitably distributed and structured opportunities to gain access to guidance and support in teaching, research, and service. We also consider whether senior faculty are incentivized to offer more junior faculty guidance and professional development and structured mentoring programs to support grant writing, collaboration, and network development.

Advancement. Advancement focuses on the extent to which faculty have the tools, support and information necessary to successfully navigate the tenure and promotion structure at their institution. It also speaks to whether those processes are experienced as fair and equitable across faculty who embrace different identities that are often marginalized in the academy. For example, we encourage institutions to consider whether the requirements for advancement (promotion, tenure) are clearly laid out at the department, college, and university levels, and if new faculty are given guidance and a workload that are compatible with these requirements? Further, we encourage institutions to consider whether the
importance of diversity and inclusion are recognized in the campus advancement standards, and how tenure and promotion committees are trained about implicit bias and the unique contributions of faculty from underrepresented backgrounds.

Satisfaction and Support. This component of retention considers the role of a professor's quality of life and how welcome the faculty member feels in their likelihood of being retained. This component encourages institutions to consider work life balance, how a departmental and institutional climate are experienced, and the extent to which faculty have opportunities to build community and connection as linked to their sense of belonging and ultimate intentions to leave or stay at their institution.

While there is always room for improvement, most reviews have commented that the Model appears to capture the full range of components that need to be addressed. For a deeper dive into the research literature informing the Institutional Model for Increasing Faculty Diversity, please see Griffin (2020) "Institutional Barriers, Strategies, and Benefits to Increasing the Representation of Women and Men of Color in the Professoriate."

Figure 1: Institutional Model for Increasing Faculty Diversity


## THE APLU INCLUDES INSTITUTIONAL SELF-ASSESSMENT FOR INCLUSIVE FACULTY RECRUITMENT, HIRING, \& RETENTION

The APLU INCLUDES Institutional Self-Assessment for Inclusive Faculty Recruitment, Hiring, \& Retention Tool (Self-Assessment Tool) is designed to help institutions assess their strengths, weaknesses, and the effectiveness of existing programs and policies as they aim to increase STEM faculty diversity. The data and narrative components were intentionally developed for institutional use; there is no "final score" or judgment on whether the institution is doing a good or bad job at faculty diversity and inclusion. Rather, these tools are intended to provide institutions with an honest and clear assessment of where they are in terms of representation, which initiatives may be working or not, and whether the institution is implementing a multidimensional strategy to promote faculty diversity and inclusion.

The Self-Assessment Tool is grounded in the Institutional Model for Increasing Faculty Diversity (described above) and was developed through an iterative process incorporating an extensive review of the literature, conversations with scholars and practitioners, and feedback from stakeholders (this process is described on page 4).

Figure 2: INSTITUTIONAL SELF-ASSESSMENT TOOL BASED ON MODEL


The Self-Assessment includes two components:

1. The Institutional Self-Assessment Questionnaire (Part I)

- The questionnaire asks institutional teams to indicate whether or not they are engaging in specific activities and practices or if there are resources and services available related to increasing diversity and inclusion in the professoriate.
- Yes or no questions allow campus teams to track whether the institution is engaging in a specific policy or practice, as well as whether the program/policy/initiative has been assessed for effectiveness.
- While teams can determine the level of granularity they would like to apply in completing the assessment, questions highlighted in blue may require collaboration with one or more academic departments or programs. Teams may consider having multiple departments or programs respond to these questions, aggregating the responses.
- There are four sets of core questions, which parallel the components of the Institutional Model for Increasing Faculty Diversity: Institutional Context, Recruitment (Outreach, Hiring, and Yield), Transition, and Retention (Professional Development, Advancement, and Satisfaction and Support).
- A fifth set of questions offers teams an opportunity to reflect on the Self-Assessment process, identify their strengths and weaknesses, and begin articulating the foundation of new strategies to increase faculty diversity through a campus action plan.

2. The Institutional Self-Assessment Data Collection Template (Part II)

- The template allows institutions to get a better understanding of their current context (the "Institutional Context" dimension of the Model) by requesting and organizing five years of enrollment, hiring, advancement and retention data.
- Specific quantitative data points are requested to gain deeper insight into the state of diversity on their campus, shedding light on where there may be particular disparities, areas of success, or patterns emerging
- Data should be disaggregated by social identity whenever possible.


## USING THE SELF-ASSESSMENT TOOL: QUESTIONNAIRE AND DATA COLLECTION TEMPLATE

## Balancing Flexibility and Structure

The Institutional Model for Increasing Faculty Diversity and Self-Assessment Tool were created to capture what is happening across an entire campus, from central administration to individual departments, relevant to increasing diversity and inclusion in the STEM professoriate. We do realize there is an inherent tension in the effort to gain a campus-wide perspective on a phenomenon that often takes place at the program or department level, and can vary a great deal across and within academic colleges.

We encourage campuses to use the tools we provide in innovative ways that allow institutions to maximize the benefits of the self-assessment process. For example, while the Model and Self-Assessment Tools are structured and intended to provide campuses with relatively consistent frameworks from which to assess progress and identify areas of improvement, these items are also meant to be somewhat flexible and can be adapted to meet the needs of each individual campus. For example, we anticipate that campuses may add questions, while not being able to use or fully answer others. Institutions may also consider having sub-units such as colleges
or departments separately complete the questionnaire or a subset of questions that are most relevant at the departmental or program level.

In addition, while the Model and the Self-Assessment Tool are directed at faculty diversity and inclusion in the STEM fields, we expect that many components of the Model and questions on the assessment tool will be relevant to other disciplines and colleges across the institution. We encourage institutions that would like to use these tools to complete a comprehensive audit of their institution to do so, separating the reporting of STEM and non-STEM components.

At the end of this Guidebook is a section on definitions of terms. These definitions are meant to help start with a common definition of each data point or term in the Self-Assessment Tool. Institutions may choose to expand or refine certain definitions as they find useful.

## Selecting a Campus Team

One of the most important early decisions a campus engaging in this process must make is identifying who will serve on the campus team. This team will organize and lead the process, coming together to discuss the project, timeline, and the goals the campus wants to realize.

We understand that each campus is in the best position to judge who would be included on an effective team to complete the self-assessment and subsequent action planning process. We suggest a strong partnership between leaders across academic/faculty affairs and diversity, equity, and inclusion offices. While most chief academic officers may not have time to chair the committee, their office, through the direct involvement of one or more of their associate provosts, should stay current with the work of the committee and be ready to provide guidance and support as needed. In addition, we recommend including individuals with the following campus roles and/or functional responsibilities:

- Provost (and an Assistant Provost), Chair
- Chief Diversity Officer (if applicable)
- Graduate Dean
- Chair or Vice Chair of the University/Faculty Senate
- Dean of a STEM college
- A senior staff member from human resources
- A senior STEM faculty member
- A STEM departmental chair
- A recently promoted and tenured STEM faculty member
- A STEM professor who is a member of an underrepresented community
- An Institutional Research Leader

For example, some campuses may want to add more deans or more chairs to the committee while other campuses may want to keep the committee on the smaller side but find a role for and interact with the council of deans or STEM chairs. Additional representatives might be included or consulted from offices of research, finance, strategic planning and initiatives, faculty development/center for teaching and learning, information technology, communications, and/or the faculty union.

We encourage the campus to reflect on occasion whether the right people are on the team, and to invite new or rotate out team members as needed. This includes taking into account how the input and work of faculty
and administrators who are women and men of color is being appropriately recognized, rewarded, and valued, and ensuring URG participation on the team is appropriately balanced. This also may include shifting the team's membership to include more members from administrative service offices (such as human resources or information technology) as the campus moves from self-assessment to action planning.

## Completing the Self-Assessment Tool

While we encourage campus teams to develop a process that works and makes sense given their context, we recommend the following steps:

1. Confirm participation of all members of the campus team.
2. The campus team holds a kick-off meeting to outline the strategy for completion of the Self-Assessment process

- Complete an initial review of the Self-Assessment Tool
- The campus team must also develop a strategy for completing the Questionnaire, determining whether a single set of responses for the institution or asking sub-units to fill out the questionnaire for their unit would be most helpful and informative.

3. The team begins quantitative data collection and completes the Self-Assessment Data Collection Template

- This effort should be led primarily by the Office of Institutional Research or IR Office representative on the committee

4. The team completes the Self-Assessment Questionnaire.

- Team members must delegate and determine how information will be collected and who will respond to specific questions.
- Identify timeline for completion of questions.

5. Campus Team reconvenes over a series of meetings to discuss the results of the Self-Assessment.

- Review Data Template.
- Review Questionnaire results.
- Work collaboratively to address questions at the end of the questionnaire (Reflection on Strategies), identifying strengths and challenges in faculty recruitment, transition, and retention efforts.

6. Campus Team develops an Action Plan (see below).

- Campus Team and institutional leaders must also be sure to identify and secure the required internal and external resources needed to execute the plan.
- Timelines should be developed for each component of the Action Plan, including who is responsible, goals and deliverables, and reporting expectations.

7. Campus implements resourced Action Plan.
8. Impact of Action Plan components are assessed, preferably by an external contractor.

## AFTER THE SELF-ASSESSMENT: DEVELOPING A CAMPUS ACTION PLAN

An Action Plan should be developed based on the information and data collected for the Campus SelfAssessment. We highly recommend that campus teams complete the final component of the Self-Assessment

Questionnaire, Reflections on Strategies, before transitioning to the Action Plan development process (see above, Step 5, point 3). In the Reflection on Strategies section of the Questionnaire, questions 1 and 2 are designed to help Campus Teams identify areas of success that can be strengthened and built on. The questions will also help identify areas where more work needs to be done across multiple levels in the university, including human resources, within or across academic colleges, or in a department or departments.

After critically engaging with the responses and reflecting on strengths and opportunities for growth, we recommend that Campus Teams engage in the following process:

1. The Campus Team should determine who will develop and monitor the Campus Action Plan. The SelfAssessment Team can continue their work, or the team can be expanded, contracted, or changed based on the results of the Self-Assessment.
2. The team charged with developing the Campus Action Plan should review the results of the SelfAssessment, particularly the items identified as strengths and weaknesses, and identify problems on which to take action and current efforts to expand.

- Addressing problems and expanding initiatives that would have the most impact on increasing the diversity of the STEM professoriate should be prioritized.
- Problems (and potential solutions) should also be identified as rooted in specific levels of the institution (e.g. program, department, college, institution wide)

3. The team generates potential strategies to implement that would be consistent with addressing identified problems, mitigating weaknesses and maximizing strengths.

- The process of identifying strategies can begin with researching promising practices implemented by other institutions, colleges, departments, and programs to address similar challenges.
- Be sure to consider how to adapt promising practices to the specific context of your institution, and the needs identified in your self-assessment.
- Brainstorm unique strategies and solutions given the institutional context, strengths, weaknesses, and priorities.

Initiate conversations with other campuses and make decisions about whether to enter into collaborative arrangements or to partner on specific strategies.
4. The team selects an appropriate number of strategies to implement given resources, timeline, and institutional investment and commitment. This may require prioritizing some areas for growth over others.
5. The team sketches out an action plan for implementing the selected strategies over multiple years with the following features:

- Statement of Goals and Objectives
- Problems to be addressed and the level or levels at which they occur
- Measurable goals to be achieved in addressing each issue/problem
- Strategies to be implemented
- Indication of which problem(s) each strategy addresses
o Assignment of responsibility for the management and supervision of development and implementation of each strategy
Timeline for development and implementation
o Assessment plan and list of indicators that progress towards goals is being reached
- Resources
- The resources needed to effectively address issues and implement strategies
- Financial
- Expert guidance
- Description of resources allocated and identified
- Financial
- Technical and expert guidance
$\diamond$ On campus
$\diamond$ From APLU
$\diamond$ Other campuses
$\diamond$ Additional sources

6. The team reviews their plan with key campus leaders

- Team provides leaders with an opportunity to give feedback
- Team confirms that they have the necessary support and access to resources to implement the plan.
- Team and institutional leaders discuss change management, and how to anticipate and address resistance to the plan, strategies, and overall efforts to promote faculty diversity.

7. Team members and university leaders announce the plan to the university community and beyond.

- The plan should be shared directly through meetings and conversations with critical stakeholders, particularly faculty in STEM departments
- Team members should create opportunities for campus community members and stakeholders to offer feedback on the plan, incorporating suggestions wherever possible


## TRACKING PROGRESS AND FUTURE REASSESSMENT

As the campus plan is implemented, it should be assessed regularly. Feedback regarding the effectiveness of the plan should be obtained from those responsible for implementation of specific strategies, college and departmental leaders, and faculty in affected departments. There should be periodic reviews (at 3- or 4-year intervals) to determine if course corrections need to be made.

Campuses may wonder what the measures of improvement and success should be. Certainly, the number and percent of increase in underrepresented faculty in the STEM ranks is the most obvious measure. But what qualifies as "progress" should be determined by each campus based on their articulated challenges and goals. We recommend that campuses consider the role of leading and lagging indicators. Leading indicators would change on a more frequent basis, and will inform leadership if the changes being enacted have more immediate effects, for example, tracking whether posting job opportunities within specific URG forums increases the number of URG applicants. The best leading indicators will measure a sub-component or sub-goal of a change, providing early notice that an initiative may need to be tweaked. Lagging indicators are the larger scale measures that show the sub-components and goals are effective. The composition of the faculty, or the number of URG faculty being promoted, would be examples of such an indicator.

It is important to recognize that this work is ongoing, and goals must be revisited and reconsidered over time. As such, campuses completing the Self-Assessment might want to identify a future date to complete the SelfAssessment process again, perhaps four or five years later.

## RESOURCES FOR DEVELOPING YOUR CAMPUS PLAN

## Resources on Strategic Organizational Change for DEI

- NSF-funded INCLUDES Aspire: The National Alliance for an Inclusive and Diverse STEM Faculty Institutional Change Initiative.
The Aspire IChange Network, which grew out of the APLU INCLUDES initiative, is a cohort-based community of transformation where groups of institutions come together to engage in a rigorous self-assessment process on their challenges and opportunities in cultivating a diverse and inclusive STEM faculty. They use the results of the self-assessment to create a data-driven action plan to address their greatest challenges or expand their most promising programs. Once their plans are formed, they move to implementation, documenting their success and/or adaptations to their plans to promote success.
- "StratEGIC Toolkit" that identifies a number of strategies and interventions to nurture inclusive campuses. The Toolkit can be found at the following website:

This work was led by scholar-practioners Sandra Laursen and Ann Austin led, funded by the National Science Foundation. They studied approximately 25 universities that have had NSF Advance grants, seeking to learn about the particular strategies for change and levers used to create more inclusive organizations and how the choice and use of strategies varies depending on institutional context. The focus was particularly on supporting the recruitment, retention, and success of women STEM scholars, but many of the ideas and approaches are relevant to attracting and retaining colleagues from many different backgrounds.

## Other Resources

- Global Diversity \& Inclusion Benchmarks: Standards for Organizations Around the World-Samples of Best Practice Benchmarks
- TECAID Model: Leading Engineering Department Culture Change in Diversity, Equity, and Inclusion
- Faculty Diversity Training Programs and Best Practices: Examples from Multiple Campuses
- NIH Scientific Workforce Diversity:
- NSF INCLUDES
- NSF INCLUDES Report to the Nation
- NSF Approved STEM Fields


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## GLOSSARY AND DEFINITIONS OF TERMS

## STEM

Please use NSF's definition of Science, Technology, Engineering, and Math (STEM) fields to identify which faculty and students to include. Find a list of NSF STEM disciplines here.

## Demographic Categories

URG: Underrepresented group. Any marginalized identity group that is less well represented in the STEM education pathway or workforce than their representation in the general population. Includes (but is not limited to): underrepresented racial and ethnic minorities (URMs), cis and transgender women, firstgeneration college students, veterans, individuals from low-income backgrounds, people with disabilities, and members of the LGBT+community.

URM: Underrepresented racial/ethnic minority. "This category comprises three racial or ethnic minority groups (blacks or African Americans, Hispanics or Latinos, and American Indians or Alaska Natives) whose representation in S\&E education or employment is smaller than their representation in the U.S. population." from NSF.

Gender (Women/Men): Aspire defines Gender Identity as "One's innermost concept of self as male, female, a blend of both or neither - how individuals perceive themselves and what they call themselves. One's gender identity can be the same or different from their sex assigned at birth" from HRC.

LGBT+: LGBT+ is an initialism that stands for lesbian, gay, bisexual, transgender, plus. The initialism LGBT is intended to emphasize a diversity of sexuality and gender identity-based cultures. It may be used to refer to anyone who is non-heterosexual or non-cisgender, instead of exclusively to people who are lesbian, gay, bisexual, or transgender. To recognize this inclusion, a popular variant adds the " + " to encompass spectrums of sexuality and gender. There has been some critique of this term because of its conflation of gender identity and sexual identity/orientation; however, there is often a shared community therein.

International (Intl): Individuals who were born outside of the USA and who hold a non-immigrant visa ( O , J1, etc).

Veteran: "A person who served in the active military, naval, or air service and who was discharged or released under conditions other than dishonorable." from U.S. Department of Veterans Affairs.

Person with Disability: A person "who has physical or mental impairment that has a substantial and longterm adverse effect on his or her ability to carry out normal day-to-day activities." (from ADA). It is important to note that some disabilities are visible while others are not.

## Student Type

Undergraduate: Includes all students enrolled in an undergraduate degree program, including associate's degrees and bachelors of arts or science. Does not include students seeking certificates only.

Graduate: Includes all students enrolled in a graduate degree program, including master's of arts or science, and doctors of philosophy (or equivalent). Does not include students seeking graduate certificates only, or doctor of medicine, veterinary medicine, pharmacy, dentistry or nursing degrees (per the NSF categorization of STEM).

## Faculty Ranks

Non-Tenure-Track/Non-Tenured: Includes all instructor and/or researcher positions neither on the tenure track, nor tenured.

Graduate Teaching Assistants: Staff who receive full or partial tuition support and a wage to perform class and/or lab instruction alongside enrollment in a graduate program.

Instructors and Lecturers ( $\mathbb{F}^{\prime}$ ): Staff who are hired to perform class or lab instruction. These appointments may include time limitations for their duration. Instructors and lecturers have a minimum of a master's degree. There is no direct pathway to tenure or promotion.

Instructors and Lecturers (PT): Staff who are hired on an annual or semester basis to perform class or lab instruction for one or more classes (less than full time). Typically does not include employee benefits. Instructors and lecturers have a minimum of a master's degree. There is no direct pathway to tenure or promotion.

Fixed Term and Adjuncts ( $\mathrm{F}^{\prime}$ ): Staff who are hired to perform a combination of teaching, research, and service responsibilities for the institution. These appointments may include time limitations for their duration. Both fixed term faculty and adjuncts have a terminal degree in their field. There is no direct pathway to tenure or promotion.

Fixed Term and Adjuncts (PT): Staff who are hired on an annual or semester basis to perform a combination of teaching, research, and service responsibilities for the institution (less than full time). These appointments may include time limitations for their duration. Both fixed term faculty and adjuncts have a terminal degree in their field. There is no direct pathway to tenure or promotion.

Professional Track Facullty (FT): Staff who are hired to perform a combination of teaching, research, and/or service/administration responsibilities. Professional track faculty may focus exclusively on research, clinical or professional practice, or may serve in areas such as the library. Professional track faculty have a terminal degree in their field. There is no direct pathway to tenure; however, at some institutions there is an advancement and promotion process. Professional track faculty with a tenure pathway should be included at the appropriate rank in the Tenure-Track/Tenured faculty categories.

Professional Track Faculty (PT): Staff who are hired on an annual or semester basis to perform a combination of teaching, research, and/or service/administration responsibilities (less than full time). Professional track faculty may focus exclusively on research, clinical or professional practice, or may serve in areas such as a library or museum. Professional track faculty have a terminal degree in their field. There is no direct pathway to tenure; however, at some institutions there is an advancement and promotion process. Professional track faculty with a tenure pathway should be included at the appropriate rank in the Tenure-Track/Tenured faculty categories.

Tenure-Track/Tenured: Includes any faculty in appointments with possibility for tenure or its equivalent. These are all considered full-time appointments. (If your institution has a pathway for tenure for part-time faculty, please let us know so we can share that information more broadly.)

Assistant: Includes faculty on tenure-track appointments (or their equivalent) who have not yet received tenure.

Associate: Includes faculty who have received tenure (or its equivalent) but have not yet been promoted to full professor.

Full: Includes faculty who have received tenure (or its equivalent) and have been promoted to full professor. Includes special endowed chair or distinguished professor appointments.

## Administrator Positions

Department Head/Chair: "A department chair is a faculty member...who serves as the academic leader and administrative head of a department of instruction or research, or a clinical service." from UCOP.

Some institutions may make distinctions between chair and head roles, with a chair, typically, being a rotational or internally elected administrative service performed by tenured faculty in the department, and a head, typically, being a leadership appointment made by a dean within specific recruitment and hiring mechanisms (either from within the faculty or external).

Assistant/Associate Dean: "Serves as the chief assistant to the Dean of a school or college in the areas of academic policy, student admissions, curriculum research and development, faculty recruitment and retention, and[/or] budget development and administration. In a larger school or college may be assigned specialized responsibilities in any one or combination of the above responsibilities. Participates on various committees, campus-wide and program in nature, in such areas as admissions policy, curriculum development, faculty guidelines, etc....Incumbents of this title generally have concurrent rank in an academic title and may have substantial instructional responsibilities." from SUNY.

Dean: "Serves as the chief academic and administrative officer of a school or college.
[A dean] is administratively responsible to the [Chief Academic Officer] for the successful development of academic policy and the maintenance of academic quality in [their] particular discipline. [A dean also] recruits and hires faculty members, especially at the senior level; coordinates the curriculum development, both in [their] school or college and in conjunction with other academic programs on the campus; is responsible for the development and presentation of a budget which will sufficiently meet the academic needs of the program by providing adequate funds for salaries, facilities and instructional resources; will generally serve as a member of several campus committees including those on admissions, curriculum faculty standards, etc., and as an academic advisor to the [Chief Academic Officer]. Incumbents of this title generally have concurrent rank in an academic title and may have substantial instructional responsibilities." from SUNY.

Senior/Central Administration: Serves at the rank of Assistant Vice President (or equivalent title) or higher for the institution as a whole. Includes members of the President or Chancellor's cabinet and their cadre of chief assistants and associates.

