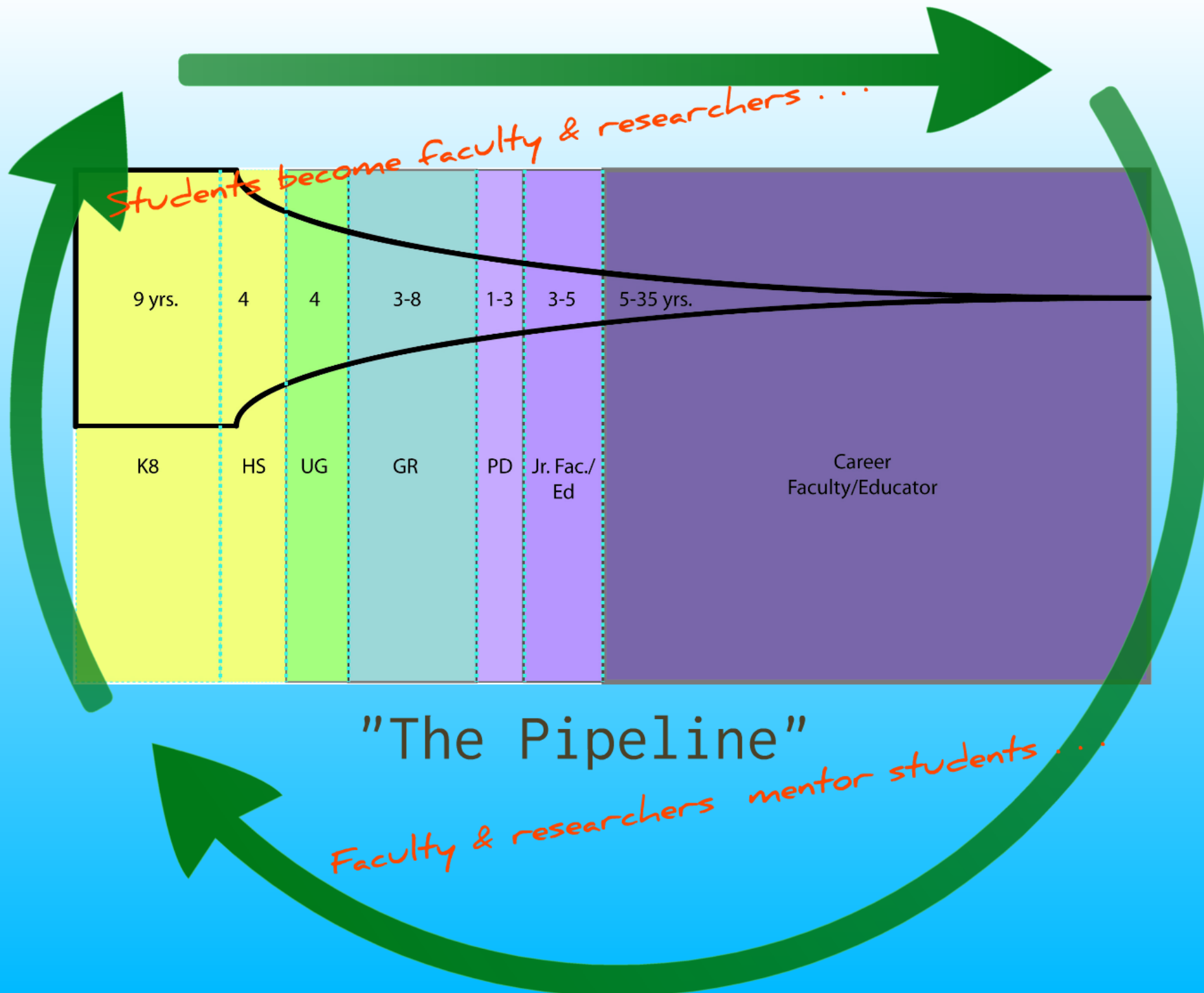


# The Diversity Briefing

The Institute for Broadening Participation  
Building and Fostering Partnerships to Increase  
Participation and Diversity in STEM

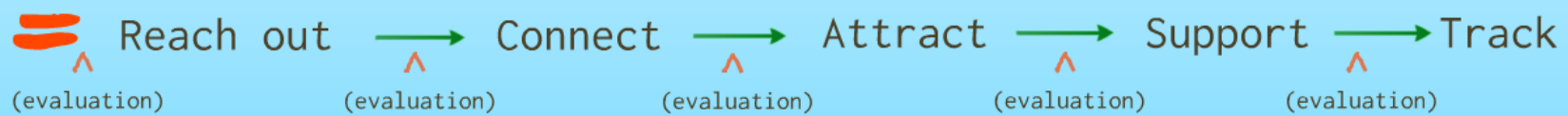
[www.pathwaystoscience.org](http://www.pathwaystoscience.org)



# Broadening Participation

  
(evaluati

ion



(a.k.a. "recruitment & retention")

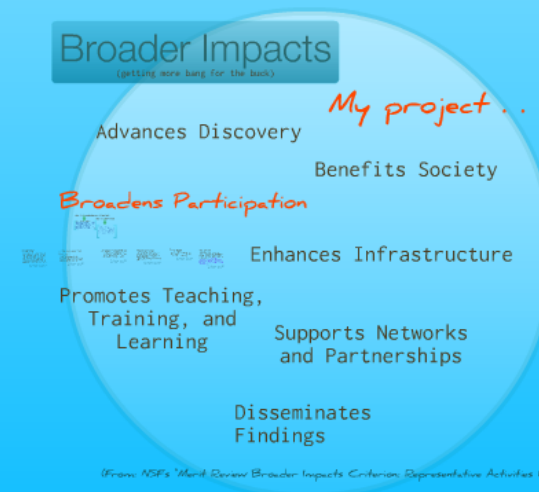
## Why is diversity important?

NSF: "The creative engagement of diverse ideas and perspectives is essential to enabling the transformative research that invigorates our nation's scientific and engineering excellence . . . and provides for the discovery and nurturing of talent wherever it may be found . . . [a]n emphasis consistent with the American Competitiveness Initiative (ACI) and the America Competes Act, federal responses to the widespread concern that the U.S. is in danger of losing its position of world leadership in science and technology."

From: NSF's "Broadening Participation at the National Science Foundation: a Framework for Action" (2008).

1. A matter of national need: STEM workforce impacts our ability to compete in the global marketplace = national competency and global leadership
2. Success!
  - Diverse teams are more effective problem solvers
  - Diversity of viewpoints and experience = richer educational environment

### 3. Broader Impacts



NSF: "The creative engagement of diverse ideas and perspectives is essential to enabling the transformative research that invigorates our nation's scientific and engineering excellence . . . and provides for the discovery and nurturing of talent wherever it may be found . . .[an] emphasis consistent with the American Competitiveness Initiative (ACI) and the America Competes Act, federal responses to the widespread concern that the U.S. is in danger of losing its position of world leadership in science and technology."

*From: NSF's "Broadening Participation at the National Science Foundation: a Framework for Action" (2008).*

# Broader Impacts

(getting more bang for the buck)

*My project . . .*

Advances Discovery

Benefits Society

*Broadens Participation*



**Diversity**  
Diversity is the presence of differences among people. It includes differences in race, ethnicity, gender, age, sexual orientation, disability, and social class. Diversity is a key factor in promoting innovation and discovery.

**Underrepresented Groups**  
Underrepresented groups are those groups that are not adequately represented in the scientific workforce. These groups include women, minorities, and people with disabilities.

**Unexamined Bias**  
Unexamined bias is a type of bias that is not recognized or acknowledged. It can lead to unfair treatment and discrimination.

**Mentorship**  
Mentorship is a relationship in which a more experienced person guides and supports a less experienced person. It is an important factor in the career development of young scientists.

**Privilege**  
Privilege is the unearned advantage that certain groups of people have over others. It can be based on race, gender, or social class.

**Inclusion**  
Inclusion is the practice of ensuring that all people feel welcome and valued. It is an important factor in creating a positive work environment.

Enhances Infrastructure

Promotes Teaching,  
Training, and  
Learning

Supports Networks  
and Partnerships

Disseminates  
Findings

*(From: NSF's "Merit Review Broader Impacts Criterion: Representative Activities (2007))*

# What is broadening participation?



NSF literature speaks to  
“broadening opportunities and  
enabling participation of all  
citizens, women and men,  
underrepresented minorities,  
and persons with disabilities.”

# What is diversity?



“individuals from  
underrepresented groups as well  
as institutions and geographic  
areas that do not participate  
in NSF research programs at  
rates comparable to others.”



# Diversity

Often connected to social identity and the groups to which we belong that give us a source of identity.

"Diversity Goals are intended to make difference acceptable and to reverse patterns of discrimination which result underrepresentation in academia."

*From: Interrupting Bias in the Faculty Search Process, by UWADVANCE*

# Underrepresented Groups

"People from groups who have historically been denied access or faced steep barriers to accessing higher education in the US."

*From: Interrupting Bias in the Faculty  
Search Process, by UWADVANCE*

# Unexamined Bias

"A form of stereotyping that is often unintentional, automatic, and outside our awareness . . . also called subtle or implicit bias."

*From: Interrupting Bias in the Faculty Search Process, by UWADVANCE*

# Meritocracy

"An ideology that there is a level playing field in the US and that people can advance as far as their hard-work and abilities allow. Ignores long-standing discriminatory practices."

*From: Interrupting Bias in the Faculty Search Process, by UWADVANCE*

# Privilege

"Systemic form of advantage for those who have it . . . invisible . . . difficult to challenge."

*From: Interrupting Bias in the Faculty Search Process, by UWADVANCE*

# Inclusion

"Valuing differences in social identities and cultural backgrounds. Working towards not only acceptance of these differences but celebration of them as well. In inclusive environments, faculty, chairs and deans are accountable for diversity and for actively fostering welcoming environments."

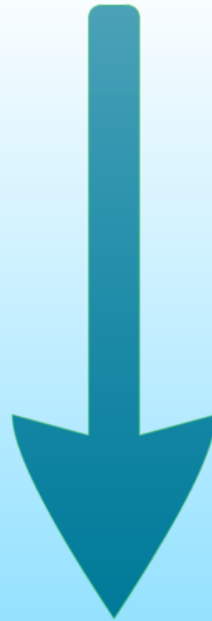
*From: Interrupting Bias in the Faculty Search Process, by UWADVANCE*

Promotes Teaching,  
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(From: NSF's "Merit Review Broader Impacts Criterion: Reproducibility")

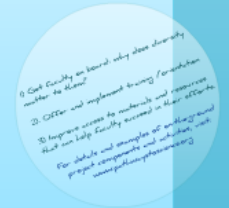


So . . . How to do it?

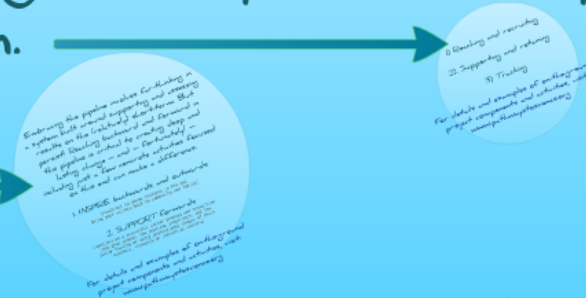
For more information . . .

# A comprehensive plan for broadening participation and increasing diversity has 5 Areas of Focus:

A. Growing the diversity awareness and cultural competency of project faculty and partners. →



B. Developing and implementing a comprehensive plan for outreach and retention. →



C. Embracing the pipeline. →



D. Evaluation: putting the systems into place that will enable you to track your efforts and assess change.

E. Dissemination: sharing your work, findings and successes at conferences and in publications.





1) Get faculty on board: why does diversity matter to them?


2). Offer and implement training / orientation

3) Improve access to materials and resources that can help faculty succeed in their efforts.

For details and examples of on-the-ground project components and activities, visit:  
[www.pathwaystoscience.org](http://www.pathwaystoscience.org)

- 
- 
- 1) Reaching and recruiting
  - 2). Supporting and retaining
  - 3) Tracking

For details and examples of on-the-ground project components and activities, visit:  
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Embracing the pipeline involves far-thinking in a system built around supporting and assessing results on the (relatively) short-term. But persist! Reaching backward and forward in the pipeline is critical to creating deep and lasting change – and – fortunately! – including just a few concrete activities focused on this end can make a difference.

### 1. INSPIRE backwards and outwards

(reach out to young students in K12 and bring your science back to community and family)

### 2. SUPPORT forwards

(continue on a successful career pathway and transition into grad school, the post-doc experience, and the junior faculty or early professional stages of their academic, research or industrial careers)

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For more information . . .

For details & examples of on-the-ground  
project components and activities . . .

To post your opportunity for students . . .

Questions?



*Visit [www.pathwaystoscience.org](http://www.pathwaystoscience.org)  
or contact:*

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Participation and Diversity in STEM

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