Systemic Change: TEAM-UP and Beyond

A new level of thinking is required to solve a persistent problem.

Edmund Bertschinger
MIT Physics and Program in Women’s and Gender Studies

AIP Assembly Meeting
March 26, 2020
African American students speaking about physics culture

“I wouldn’t say people don’t care. It’s just that you could tell that people at PWIs [predominantly white institutions] are a lot more oriented on their own task. I don’t say it’s selfish, but they’re a little more selfish toward their own goals.”

“At community college, our curriculum is just to set us to go straight to [name of four-year college]...You complete this session at [name of community college] and they just throw us in a pool at [the four-year] college. No representation. No study groups, nothing. Just there by yourself. A lot of my friends that graduated ahead of me said they’re either struggling or they’re trying to survive; they have to come back to [name of community college] to seek help rather than seeking help at the senior college.”

We need, in every community, a group of angelic troublemakers.
—Bayard Rustin
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Items in blue cells describe both key findings and recommendations. Items in gray cells describe recommendations only.

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I had no idea history was being made. I was just tired of giving up.
—Rosa Parks
How does academia change?

Change Management Research (Kezar)

• First Order Change—change processes
• Second Order Change—change norms and values
• Theory of Change—a comprehensive description and illustration of how and why a desired change is expected to happen in a particular context


We can’t teach what we don’t know, and we can’t lead where we won’t go.
—Malcolm X
How does second-order (deep, cultural) change happen?

- **Sensemaking** - a learning process of creating meaning around concepts and ideas through a variety of social inputs including dialogue with others.

- **Shared leadership** - top-level leaders collaborate equitably with bottom-up change agents (Kezar and Holcombe 2017)

  Shared leadership combines the best of grassroots (bottom-up) and top-down leadership for change.

—Martin Luther King, Jr.

Our goal is to create a beloved community and this will require a qualitative change in our souls as well as a quantitative change in our lives.
“The underrepresentation of African Americans in physics and astronomy is a systemic problem that cannot be solved through the work of individual faculty, departments, or professional societies. It requires coordinating the efforts of stakeholders acting at all of these levels. In addition, standard approaches of strategic planning are unlikely to succeed because the underlying norms, values, and culture of the profession need to be addressed before lasting changes can occur.”

Not everything that is faced can be changed, but nothing can be changed until it is faced.

—James Baldwin
“SEA Change is a movement toward institutional transformation beyond small-scale interventions. The goal is to focus institutions on identifying the policies, processes, programs, and practices that perpetuate exclusion and create systemic barriers to true diversity, equity, and inclusion.”

Once you do away with the idea of people as fixed, static entities, then you see that people can change, and there is hope.
—bell hooks
TEAM-UP Recommendation 6a

Professional societies and individual departments should each develop a theory of change utilizing sensemaking and shared leadership. The societies should hold discussion forums on this topic. Additionally, representatives from all groups should jointly produce a unified change management model highlighting the interactions among the societies, universities, departments, and individual physicists and astronomers needed to support their efforts.

One of the things that has to be faced is the process of waiting to change the system, how much we have got to do to find out who we are, where we have come from and where we are going.

—Ella Baker
TEAM-UP Recommendation 6c

The professional societies should empower and prepare change agents by establishing and participating in faculty networks, learning communities, and skill-building workshops, including organizing sessions at their annual meetings to discuss this and related reports.

There is no thing as a single-issue struggle because we do not live single-issue lives.
—Audre Lorde
APS Inclusion, Diversity, and Equity Alliance (APS-IDEA)

• APS-IDEA provides a flexible platform that physics organizations can use to support implementation of TEAM-UP recommendations or any other EDI effort, to address their own unique challenges.
• Two-year pilot project funded by APS Innovation Fund (10/19–9/21)
• Addresses multiple levels of change: individual, organization, society
• 30 Physics Departments or Labs are being recruited now to join a national network

• **Vision:** As a result of collective efforts, physics and related fields will become more inclusive of all social identities, with a diversity reflective of the nation, and with an equitable distribution of opportunities and resources.

• **Mission:** APS-IDEA seeks to empower and support physics departments, laboratories, and other organizations to identify and enact strategies for improving equity, diversity, and inclusion. It will do so by establishing a community of transformation.

*Sometimes I hear people saying, “Nothing has changed.”*  
*Come and walk in my shoes.*  
—John Lewis
Pitfalls of DIY Cultural Change

“A common mistake is to assume that well-intentioned faculty, especially those already in leadership roles, can manage such a team without external (and therefore independent and unbiased) help.... Teams that rush to action prematurely are often forced to backtrack to develop relationships and understanding of why resistance develops among key institutional stakeholders.”

S. Elrod and E. Kezar, Increasing Student Success in STEM (2016).

Like any artist without an art form, she became dangerous.
—Toni Morrison
One thing you can do

Study and implement *Shared Leadership* in your organization.

*The price one pays for pursuing any profession or calling is an intimate knowledge of its ugly side.*
—James Baldwin
Conclusions

1. Physicists cannot solve the discipline’s equity problem with traditional methods of physics. The problem is not qualitative, not quantitative.

2. Successful culture change for equity, diversity, and inclusion requires utilizing Theories of Change plus Sensemaking and Shared Leadership.

3. The TEAM-UP report provides recommendations for individuals, departments, and professional societies to initiate cultural change.

4. A social movement is a promising means to foster change. APS-IDEA has been created to support grassroots organizing in the physics community based on Political and Cognitive theories of change. AAAS SEA Change is based on an Institutional theory of change.

—I believe in social dislocation and creative trouble.
—Bayard Rustin
For further information

1. www.aip.org/teamup - AIP TEAM-UP report
2. seachange.aaas.org - the SEA Change initiative
5. accessnetwork.org - The Access Network
6. tamiastronomy.org - Towards a More Inclusive Astronomy

*Then the personal as the political can begin to illuminate all our choices.*
—Audre Lorde
Backup slides
Basics of APS-IDEA

Guiding principles:
• Center people whose identities are marginalized
• Utilize *sensemaking*, including creating *brave spaces* supporting learning from mistakes
• Start with research-based change-management methods
• Shared leadership: departmental teams should span the range of social power from students to faculty

Goal is to support almost any departmental EDI effort:
• AIP TEAM-UP recommendations
• AAS Diversity and Inclusion in Astronomy Graduate Education recommendations
• APS CSWP/COM and AAS Climate Site Visits Program
• The Access Network
• etc.

*If there is no struggle, there is no progress.*
—Frederick Douglass
Theories of change (Kezar)

• Scientific management – top-down, linear, strategic planning
• Institutional – context relative to peers, accreditors, government
• Evolutionary – response to external pressures
• Cultural – norms and values, storytelling
• Social cognition – sensemaking, organizational learning
• Political – social power and influence, coalitions

Here and often in social sciences, “theory” means a set of assumptions, concepts, and hypotheses about how people behave in certain contexts, providing an interpretive framework to qualitative observations.

Let me give you a word of the philosophy of reform.
—Frederick Douglass
TEAM-UP Recommendation 6b

Departments should review and learn from related reports and programs of other science and scholarly organizations including the AAS (Nashville Recommendations, Diversity and Inclusion in Astronomy Graduate Education), APS (LGBT Climate in Physics, Effective Practices for Recruiting and Retaining Women in Physics, Effective Practices for Physics Programs, and the APS Inclusion, Diversity, and Equity Alliance), AAPT (New Faculty Programs), AAAS (SEA Change institutional awards and a parallel Physics and Astronomy SEA Change departmental award planned by disciplinary societies in the physical sciences), AAC&U (Project Kaleidoscope), and the National Academies of Science, Engineering, and Medicine (Sexual Harassment of Women, The Science of Effective Mentorship in STEMM).

People resist by ... naming their history.
—bell hooks
Prevent information overload

“The reports and programs listed in Recommendation 6b overlap significantly in themes and content with this report, and they recognize similar efforts by many organizations in our community. To prevent information overload, the professional societies should help departments customize their efforts based on self-assessment and prioritization.”

Hard times require furious dancing. Each of us is proof.
—Alice Walker
TEAM-UP Recommendation 6d

The professional societies should establish or increase rewards and incentives for efforts by faculty members to improve the success of African American students (and other marginalized group members, who are not the focus of this report) in physics and astronomy.

If now isn’t a good time for the truth, I don’t see when we’ll get to it.
—Nikki Giovanni
TEAM-UP Recommendation 6e

The professional societies and individual departments should gather relevant quantitative, qualitative, and descriptive data about their organizations, disaggregated by race/ethnicity/gender, as appropriate. Some organizational body, to be determined, should assess and publicly communicate progress toward the recommendations of this report every two to four years with both quantitative and qualitative data similar to those used in this report.

This is closely aligned with a major recommendation of the AAS Report on Diversity and Inclusion in Astronomy Graduate Education

There is no agony like bearing an untold story inside you.
―Zora Neale Huston
Creating Change through Social Movements

Social movements are organizations and networks that fundamentally seek to challenge the configurations of power that currently produce inequality. (Pastor and Ortiz 2009)

Elements:
• Shared values and vision → sets the goal
• No single leader → efforts advanced by community organizers
• Framing → sets the terms of the debate
• Research base → issues and policy, strategy
• Networks and alliances → scaling up
• Commitment to the long term

A social movement that only moves people is merely a revolt. A movement that changes both people and institutions is a revolution. —Martin Luther King, Jr.