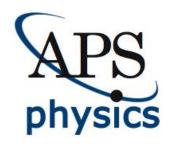


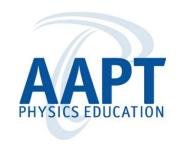
# EP3 Departmental Action Leadership Institutes (DALIs):

A scalable model for supporting departmental change efforts

Joel C. Corbo, University of Colorado Boulder David Craig, Oregon State University

February 24, 2022











# **Supporting Change**

# Real change is hard

Sustainable change is harder



## **EP3 Overview and Goals**

The overarching objective of EP3 is to help strengthen and improve physics departments and programs nationwide by building on research and community knowledge and practice.

#### **Project Goals**

- Disseminate the physics community knowledge and expertise contained in the EP3 Guide
- 2. Encourage and support adoption of the effective practices
- 3. Encourage and support development of a culture of continuous self-reflection and improvement in physics departments
- 4. Support departments in achieving specific goals and objectives by employing the knowledge, practices, and underlying philosophy of the EP3 Guide

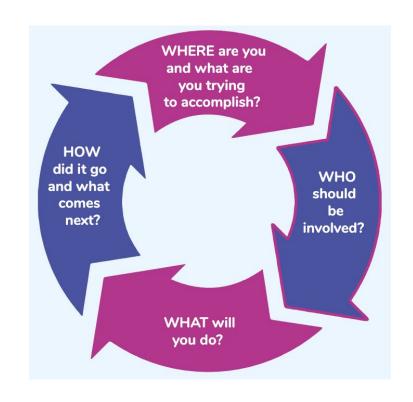


## The EP3 Guide

# The EP3 Guide is designed to support departments in undertaking change efforts

- Provides information based in research and the collective knowledge of the physics community
- Philosophy: Vibrant physics programs engage in a cyclic process of self-reflection that guides their decisions and actions

There's a lot in there...





## What is a DALI?

The Departmental Action Leadership Institutes (DALIs) are another mechanism for supporting the goals of EP3.

They provide intensive support for major departmental change efforts by training department leaders to be effective agents of change

- Intended for departments facing major challenge or opportunity and/or wanting to make a significant change
- Multiple departments participate in year-long online community, led by two DALI facilitators (Corbo, Craig)
- Departments create action teams to implement change
- The first DALI began in January 2021 with an intensive virtual workshop (4 3.5-hour sessions). It continued with 90-minute bi-weekly meetings for a year (19 meetings total) plus a 3-hour wrap-up workshop.



## **Intended Outcomes**

#### For the departmental change leaders:

- Effectively lead a local departmental team and strengthen the capacity of that team to create and sustain change.
- 2. Help their department identify goals, identify resources available to achieve those goals, and develop a plan to create and sustain the desired change.
- 3. Help their departmental teams implement and assess their plans.

#### For the department:

- 1. Develop capacity to create and sustain changes to the department and its programs.
- 2. Develop a culture of continuous self-reflection, assessment, and improvement.
- 3. Make meaningful progress toward addressing the challenges that led them to join the DALI.



## **Departmental Foci**

#### Possible departmental foci include:

- Increase enrollment and retention
- Develop shared mission, vision and plan for department's future
- Implement major recommendations of a program review
- Implement evidence-based instruction
- Improve department climate
- Develop & implement program-level student learning assessment plan

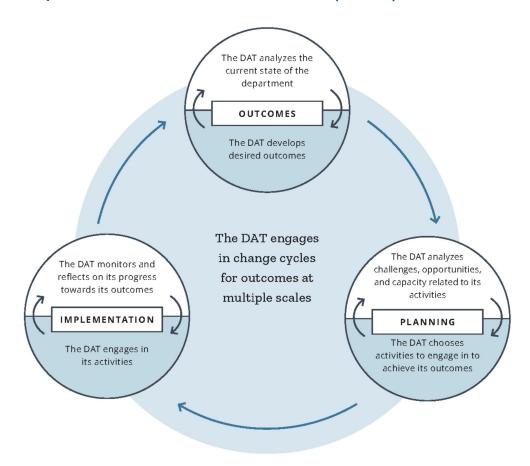


# **Local Department Teams**

#### DALI builds on the successful Departmental Action Team (DAT) model

A DAT is a team of 6-10 faculty members, students, and staff from the same department.

- Charged with leading a change effort in their department
- Supported by trained internal or external facilitators





## **DALI Curriculum**

#### The DALI supports participants in developing key change-related skills.

#### Carrying out the change effort

Defining a vision
Setting goals
Gathering/analyzing data
Engaging in activities
Assessing results

#### Developing a high functioning team

Recruiting a diverse team
Setting up norms
Defining team structures
Managing conflict/power differentials
Motivating team members

#### Building positive relationships

Gathering input
Cultivating allies
Developing buy-in
Interfacing with other units

#### Growing as change agents

Learning about models of change Recognizing opportunities to advance change

Feeling more capable of/motivated to create change

#### Effective Practices for Physics Programs

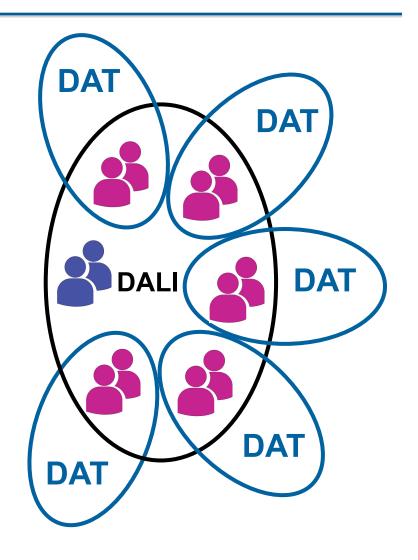
## **DALI Structure**

Participants: Two people from each of five physics departments

Facilitators: Provided by two experts in departmental change (currently, Joel Corbo and David Craig)

#### Departmental Action Teams (DATs):

A local team, one per department, charged with carrying out that department's change effort.





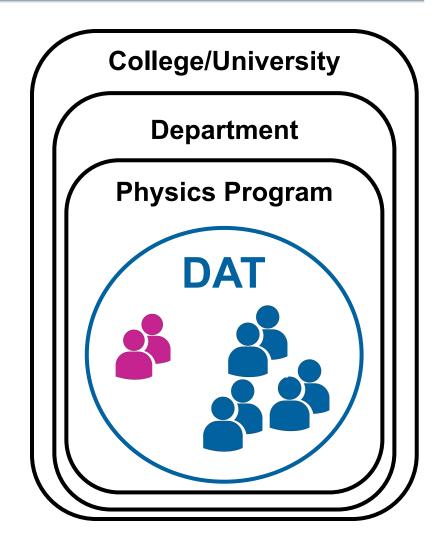
## **DAT Structure**

The DATs "do the work" of visioning, designing, implementing, and assessing the change.

Each DAT is embedded in a particular physics program, department, and institutional context, which will all impact how the DAT carries out its work.

Each DAT is lead by the respective DALI participant pair. They translate the ideas about change from the DALIs into practice in their DATs.

The DATs include other department members (e.g., faculty, students, staff, alums) who work with the leader pair to carry out the DAT's work.





## Is the DALI Effective?

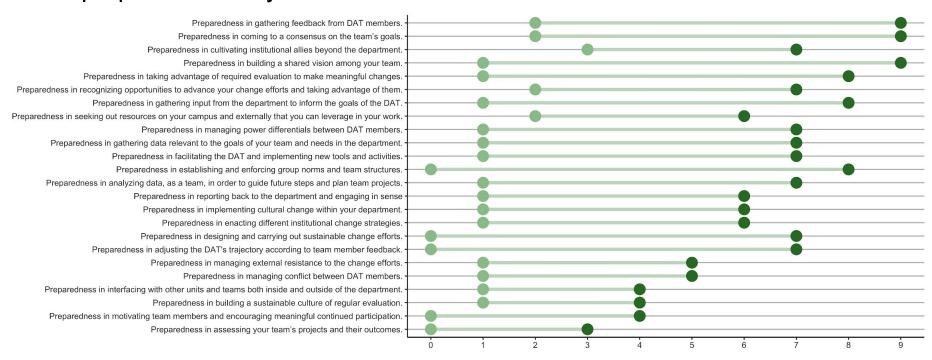
# Let's look at some data!

Thanks to Rob Dalka for putting this together



## **Preparedness**

#### How prepared did/do you feel in...



Possible responses: Not at all, Scarcely, Moderately, Largely, Completely Plotted is number of respondents who selected Largely or Completely Light green is pre-DALI, dark green is post-DALI

# **Preparedness**

#### All or almost all change leaders left DALI largely or completely prepared for

- Gathering feedback from DAT members. (2 → 9)
- Coming to a consensus on team goals.  $(2 \rightarrow 9)$
- Building a shared vision among the team.  $(1 \rightarrow 9)$
- Taking advantage of required evaluation to make meaningful changes.  $(1 \rightarrow 8)$
- Gathering input from the department to inform the goals of the DAT.  $(1 \rightarrow 8)$
- Establishing and enforcing group norms and team structures.  $(0 \rightarrow 8)$

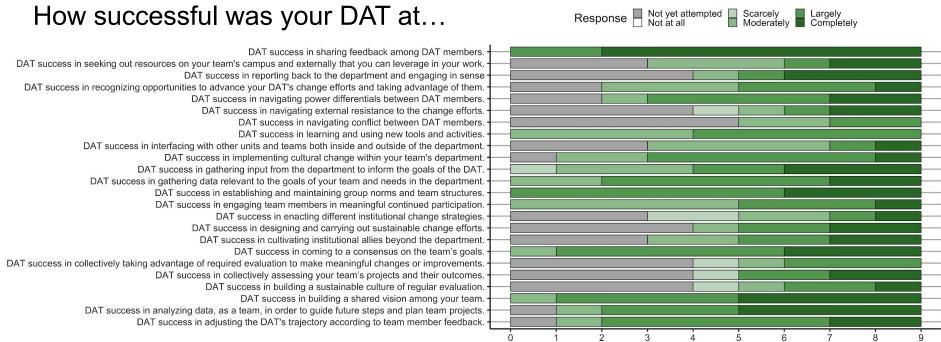
#### Less than half of leaders left DALI largely or completely prepared for

- Interfacing with other units and teams inside and outside the department.  $(1 \rightarrow 4)$
- Building a sustainable culture of regular evaluation.  $(1 \rightarrow 4)$
- Motivating team members and encouraging continued participation.  $(0 \rightarrow 4)$
- Assessing teams' projects and outcomes. (0 → 3)



#### **DAT Success**





Possible responses: Not yet attempted, Not at all, Scarcely, Moderately, Largely, Completely

## **DAT Success**

#### Top areas of DAT success

- Sharing feedback among DAT members.
- Establishing and maintaining group norms and team structures.
- Building a shared vision among your team.
- Coming to a consensus on team goals.
- Analyzing data, as a team, in order to guide future steps and plan team projects.

#### Least attempted areas

- Navigating conflict between DAT members.
- Reporting back to the department and engaging in sense making.
- Navigating external resistance to change efforts.
- Designing and carrying out sustainable change efforts.
- Taking advantage of required evaluation to make meaningful changes.
- Assessing teams' projects and outcomes.
- Building a sustainable culture of regular evaluation.



# **Quotes from DALI Participants**

What have you appreciated the most about your DALI experience?

"Time. The DALI and the DAT were a challenge to keep up with. However, the structure provided me with an incentive to do the work of the DALI.

Support. The DALI was a reach experience with a lot of information and resources. It's a little overwhelming, but the sustained support and wealth of information allowed for the process of growth.

Modeling. The DALI provided many opportunities to model the behavior of a DAT. For example, determining the norms of the DALI was also an activity repeated in many DATs.

Community. Just like a group of students struggling together through Quantum Mechanics, the DALI provided an atmosphere of for the DATs to struggle together as well as learn and commiserate with each other. Enacting DATs would be much more challenging without this support."



# **Quotes from DALI Participants**

How has your participation in DALI shaped your professional work?

"It has help me appreciate the role of consensus in developing a plan and carrying out activities. It has helped me appreciate the perspective of students and faculty from other areas when developing ideas. It has helped me to learn to listen more and speak less when working with a team even if I am the leader of that group."

"DALI has been tremendously influential in my professional life. For the first time I am truly believing that my physics program is salvageable. I am motivated to bring my department back into a thriving state. I feel equipped and trained to lead this change."



# **Quotes from DALI Participants**

Thinking about everything you have experienced in DALI, what are you most proud of accomplishing/overcoming professionally this past year?

"By far, what I am most proud of is coming away from the DALI feeling like I can lead a change effort in my Department not by solving the problem but by facilitating a change effort involving a diverse group of stakeholders. Such change will be much more robust and lasting."





# Questions?



## **Reflection and Discussion Time**

We'd like to provide some time for you to think about how this model might be useful/relevant at your institutions.

In breakout rooms, consider these prompts:

- What aspects of the DALI model might be useful in your context?
- How might it complement existing efforts supporting department-level change work?
- If you were to implement parts of the DALI model, what would be your hoped for outcomes? What infrastructure would you need? Who would lead them?

Record your thoughts at <a href="https://tinyurl.com/ASCN2022DALI">https://tinyurl.com/ASCN2022DALI</a>, and be prepared to share useful insights with the whole group!













This material is based upon work supported by the APS, the AAPT, the APS Innovation Fund, and the National Science Foundation under Grant Nos. 1738311, 1747563, 1821372, and 2033894. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation, AAPT, or APS.



## **Learn More!**

About the EP3 Guide at <a href="mailto:ep3guide.org">ep3guide.org</a>
About the DAT Project at <a href="mailto:dat-project.org">dat-project.org</a>

We are planning to publish DALI resources/curriculum within the next year. Sign up for more information at

https://forms.gle/kBZgYVTfhZyC7Lws6

