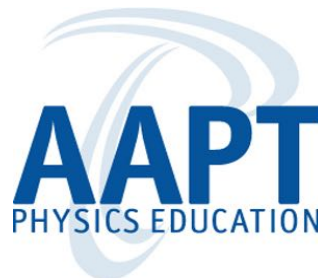
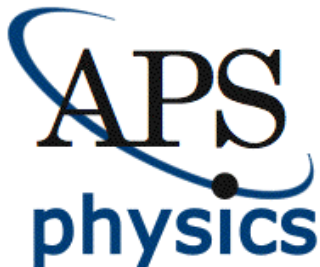


## Effective Practices for Physics Programs: The EP3 Guide & Communities

*David Craig*  
*Oregon State University*



**APS, in cooperation with AAPT, is creating a guide to help physics departments improve, review and assess their programs ... and to help them meet challenges they may face**

The EP3 Project is bringing together research and information about practices for building successful and effective physics programs from experts across the American physics community.

## Who is it for?

- Physics department chairs
- Program leaders
- Program reviewers
- Programs being reviewed
- **Departments & faculty facing program challenges or interested in improving their programs**
- Anyone involved with student learning assessment
- Administrative leaders

## Help department chairs (& other program leaders)

- External program assessment / departmental review
- Improve usefulness of assessment
- Bring together known literature on topics
- Collect practices recognized by the community as effective when there is insufficient evidence-based literature
- **Encourage discussions in departments on continuous improvement of physics programs using evidence**
- Collect information for departments to use in advocating for resources to improve their program
- Engage PER community on departmental needs

## Is:

- Collection of community knowledge and evidence-based practices
- Authored, reviewed, approved by physics community (>200!)
- *Living* document (not static), with stewardship by APS COE
- Primarily online
- Ethics and diversity included throughout
- Effort to encourage evidence-based pedagogy
- Transform mandatory assessment into useful exercise
- Suggestions on how to improve all aspects of a program
- Opportunity to extend reach of education research
- **Key:** flexible, not prescriptive; mindful of local contexts

# What the EP3 Guide Is & Isn't

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## Is:

- Tool to help departments understand who they are and what they want to be, and then provide community-based knowledge and information to help them be and do those things

## Isn't:

- Accreditation or program certification
- Mandate to conform
- **Finished (yet)**

**The EP3 Project will also support the adoption and use of the Guide with a range of community engagement efforts**

## EP3 Guide Engagement & Support Mission & Objectives

- i. Disseminate the physics community knowledge and expertise contained in the EP3 Guide
- ii. Encourage and support adoption of the effective practices therein for the betterment of the American physics community
- iii. Encourage and support development of a national departmental culture of continuous self-reflection and improvement.
- iv. **Directly support American physics departments to achieve specific goals and objectives by employing the knowledge, practices, and philosophy underlying the EP3 Guide**
- v. Provide a model for systematically improving STEM education and departments nationally and internationally
- vi. Provide an alternative to ABET or other accreditation through community engagement in an alternate process.



## Planned Initiatives:

- i. Conference panels and presentations
- ii. Workshops at APS, AAPT and other conferences
- iii. Workshops at specialized meetings such as the Department Chairs Meeting or New Faculty Workshop
- iv. EP3 Online Communities**

**Watch for talks and workshops at future meetings**

## Who are they for?

**Departments facing a challenge (*such as low enrollments or an upcoming program review*)**

**or**

**wanting to make a significant change (*implementing evidence-based instruction, developing a student learning assessment plan*)**

## Notice:

***Departments*** agree to join the community

### Departmental representatives

- Participate in community meetings
- Work with their department locally to implement the desired changes

## What are they?

- 3-5 teams of 1-2 representatives from participating departments commit to work together and with 1-2 EP3 facilitators for 1 year (min)
- In-person kickoff meeting, bi-weekly videoconferences
- Community curriculum helps lead participants through developing a better understanding of the situation they face and the steps necessary for creating & sustaining change
- Representatives work with their own department to implement change & report back to community (“accountability partners”)

## Outcomes for participating teams & departments:

1. Strengthen the ability of participants to effectively lead a local departmental team and strengthen the capacity of that team to make changes
2. Support participants in helping their department to identify goals and resources to achieve those goals, and to develop a plan create & sustain the desired change
3. Support participants in helping their department implement and assess those plans
4. Support participants in creating a culture of continuous self-reflection and improvement in their own departments

## EP3 Community development team:

- Joel Corbo (University of Colorado)
- David Craig (Oregon State University)
- Sam McKagan (PhysPort, McKagan Enterprises)

## with input from

- Chandra Turpen (University of Maryland)
- Stephanie Chasteen (Chasteen Consulting)

## Community facilitators:

- Corbo, Craig
- Future: recruited from communities and elsewhere

## How do we join?

- First community begins January 2020
- (recruiting begins in the fall)
- Department must submit an application

## Interested?

- Signup for information today
- Contact me today or at [craigda@oregonstate.edu](mailto:craigda@oregonstate.edu)
- Visit [ep3guide.org](http://ep3guide.org) and sign up for mailing list

## Come give us feedback! External Evaluator: Stephanie Chasteen

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- If you are a...
  - Department chair
  - Undergraduate studies director at a university
  - New chair
- Get a sneak preview of the EP3 Guide and give your feedback about the guide structure and content.
- Meet in the front



Contact her at  
[Stephanie@ChasteenConsulting.com](mailto:Stephanie@ChasteenConsulting.com) if you'd like to  
participate at a later date



**Co-chairs:**

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- Mike Jackson ([Michael.Jackson@millersville.edu](mailto:Michael.Jackson@millersville.edu))

**Editorial Director:** Sarah “Sam” McKagan ([mckagan@aps.org](mailto:mckagan@aps.org))

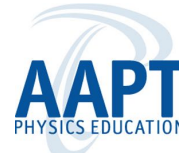
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