PDP Frequently Asked Questions for Advisors

PROFESSIONAL DEVELOPMENT

How is the PDP useful for participants' careers?

The PDP is focused on teaching, but what is learned can be applied to mentoring, collaboration, teamwork, training and on-boarding new personnel. All participants work on a team, and those that return to the program often lead a team. Many alumni (now in academic and non-academic positions) have indicated that their own research skills were improved and that the professional skills gained in the PDP apply generally to their career development. The PDP also exposes participants to a network of scientists and engineers beyond their home department, who in many cases will be their future colleagues.

How can I best support my grad student/postdoc while they are doing the PDP?

Advisors can honor the commitment and effort PDP participants put into becoming a better educator by allowing them the time and space to fully participate in the PDP (i.e. by avoiding time conflicts during the two Institutes and the teaching experience – see next page), and showing interest in what they learn and how they will apply it to their teaching. Advisors can also help find opportunities for their grad student/postdoc to present the unit they designed within their research group, department or possibly in a conference setting. Finally, advisors who are fully supportive of the PDP experience can spread the word to their colleagues.

Why should a participant do the PDP multiple times?

More than half of all PDP participants return one of more times to the PDP. Much is gained from returning. Participants do new things each year and take on increasing leadership roles, including leading their own team in the practical teaching experience. For many graduate students and postdocs, this kind of practical experience in leading a team is the only leadership training they will receive early in their career.

HOW GRAD STUDENTS AND POSTDOCS BENEFIT FROM PDP PARTICIPATION

THE PDP IS MEETING A NATIONAL NEED TO BETTER PREPARE Ph.D.s

*"Examples of important skills that Ph.D.-level employees typically need, whether they are employed in academia or elsewhere, but for which most new **Ph.D.s are ill prepared** include **project management**, **leadership**, the ability to **work in teams**, the expertise to address complex **interdisciplinary problems**, and the **ability to teach**."*

President's Council of Advisors on Science and Technology, 2012

PDP PARTICIPANTS GET JOBS

"The specific values and techniques taught [in the PDP] were directly cited as a major reason I was chosen for my current faculty position"
- Assistant Professor

During my interview I had to give a teaching demonstration and discuss inquiry and learner centered models of education. I felt confident doing this as a direct result of my preparation in the PDP"
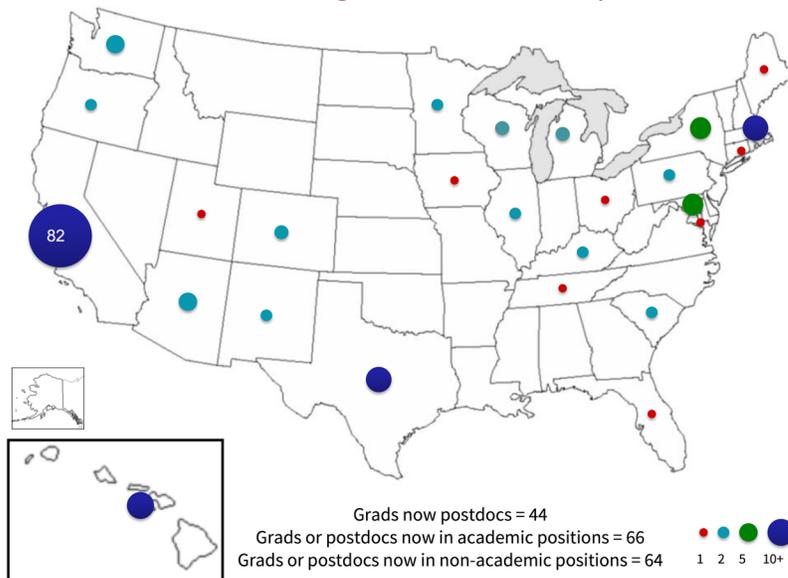- Assistant Professor

PDP PARTICIPANTS GAIN LEADERSHIP EXPERIENCE

"For the first time in my professional life, I have been given the opportunity to manage a project and lead a small team, all thanks to the PDP."
- 5th year grad student

As of 2017, at least 130 PDP ALUMNI HAVE MOVED INTO ACADEMIC & INDUSTRY JOBS

66 hold long-term academic positions

Grads now postdocs = 44
Grads or postdocs now in academic positions = 66
Grads or postdocs now in non-academic positions = 64

1   2   5   10+

TIME INVOLVED

What is the time commitment?

On average, participants spend about 100 hours on the PDP. This includes 6 days of workshops, about 2 days of teaching, and 4-5 days of design and preparation with a team. Participants are placed on a teaching team upon acceptance, while ensuring that there are not conflicts with their other obligations.

When does the time commitment take place?

There are two intensives that participants attend:

1) The Inquiry Institute (4 days) held each March in Monterey, CA
2) One of two Design Institutes (2 days) held in Santa Cruz and Houston in April.

After these two institutes, participants work independently on their teaching team, managing meetings that can be worked around their research and other obligations. The practical teaching experience is generally over the course of one or two days.

TEACHING EXPERIENCE

Where and what do participants teach?

Participants are placed on a team that designs and teaches an "inquiry" lab unit at one of ISEE's many teaching venues. Most teaching venues provide a workshop format of about 2 days, so teaching takes place in a concentrated period of time, minimizing the impact on participants' schedule. The lab units taught by PDP participants can be in many different disciplines and ISEE makes every attempt to match participants with their research disciplinary interests.

How is PDP teaching different than being a TA?

Most TA experiences are merely following a lab manual. The PDP is an opportunity to design a unique lab unit, using what is known about how people learn, and then teach it. The PDP is a transformative experience, meant to be something that participants use in their teaching, mentoring, and professional advancement for many years**.**

Will the PDP interfere with a participant's research?

The PDP is designed to work well with the heavy demands of research placed on graduate students and postdocs. The two intensives take advantage of weekend days, and are as compressed as they can possibly be. The teaching experience is scheduled ahead of time, and can be chosen to minimally impact other obligations. In addition, because PDP participants are tasked with teaching research skills ("inquiry"), many report that the PDP improves their own research skills.

What happens if a PDP participant is unable to complete the whole program?

Very few participants do not complete the program, and it is a big deal for those that don't. Because participants are working on a team, the whole team is impacted, and potentially one of ISEE partners hosting the teaching venue will also be impacted. Participants who pull out from the program before completion are not eligible for a certificate, return participation to the PDP, or letter of reference from ISEE.

PROGRAM COSTS

What is the cost for participation, and how can participants cover costs?

The minimum cost for the PDP is ~$3500, which includes a $2900 registration fee (explained below) and a lodging/meal plan at the Inquiry Institute. Additional costs include transportation to Monterey, CA for the Inquiry Institute, some meals not included in the meal plan, transportation to a Design Institute (either Santa Cruz, CA or Houston, TX), and lodging and meals at the Design Institute.

ISEE works earnestly all year to raise funds that provide scholarships for many of our participants. For participants living in the Santa Cruz area, full scholarships are approximately $3500. For those that require travel to both the Inquiry Institute and Design Institute, the value can be as high as $5400. In addition, some chapters have their own funding sources that cover the cost of participation. We recommend that advisors review the cost worksheet outlining all program costs. Full or partial support from advisors enables us to extend scholarships to more participants, and advisor support is a factor we consider in accepting applicants to the program.

What costs are not covered in ISEE scholarships?

ISEE generally does not cover ground transportation and meals not provided during the Institutes (breakfasts and some dinners). ISEE also asks that participants try to find institutional or other funds for transportation and lodging at Design Institutes, and encourages participants to find creative solutions, such as staying with a local participant.

What is included in the registration fee and why is it more than most conferences?

The PDP is not a conference, but rather a highly structured training program that includes a team of instructors and requires extensive infrastructure. The registration fee covers the per person cost of the program, including recruiting and application processes, instructor and management salaries, team placement and consultation, information management, communication, teaching venue coordination, program evaluation, and many additional details.