Workshop for Early Career Geoscience Faculty: Strategic Planning and Support At the Beginning of Academic Careers

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HELPING TO PREPARE STUDENTS
BY PREPARING EARLY CAREER FACULTY

Supporting faculty early catalyzes a career-long impact

• on the faculty

• on their future students

Photos by Carol Ormand
CHALLENGES FOR EARLY CAREER FACULTY

New faculty can feel overwhelmed from:

- New Institution
- New Courses
- New Research
- New (not clearly defined) expectations

New faculty can benefit from:

- Hearing tips & getting feedback from other faculty
- Developing a network of support
- Making strategic plans
WORKSHOP FOR EARLY CAREER GEOSCIENCE FACULTY

- 5-day workshop with associated web resources
- Offered annually since 1999; > 850 faculty
- Part of NAGT On the Cutting Edge program
- Support from NSF, GSA and AGU
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PCAST “Engage to Excel” 2012 report

“Establish discipline focused programs ... to train current and future faculty in evidence-based teaching practices”
WORKSHOP PROGRAM PROMOTES EVIDENCE-BASED TEACHING PRACTICES

Workshop sessions on

- Course goals
- Active learning strategies
- Assessment
- Metacognition
- Misconceptions
- Lesson design
- Assignment/Activity Review
- ...

Figure modified from D. McConnell
The workshop totally changed my view of teaching from teacher-oriented to student-oriented. It's no more what I want to teach but what students need to learn or take away from the course.

Participant quote from end-of-workshop survey
Strategic planning & setting goals are themes that run throughout the workshop.
Workshop Program Supports Faculty by Developing Rapport & Community

Sunday
- Gallery walk

Monday
- Feedback on course goals
- Collaborative lesson design

Tuesday
- Lunch discussions
- Individual consultations with leaders

Wednesday
- Review of proposal summaries
- Review of activities/assignments

Thursday
- Informal poster session
- Building a network of support
- Strategic action planning
Meeting other faculty in my position did a lot to relieve the stress of feeling that one is all by oneself in struggling with teaching and research.

Participant quote from end-of-workshop survey
WHO PARTICIPATES?
WORKSHOP PARTICIPATION BY INSTITUTION TYPE

- PhD: 51%
- BA/BS: 29%
- MS: 14%
- 2YC: 6%

Data from 2003-2015
Early Career Workshop Participants
n=410

Based on highest degree offered by department
WHO PARTICIPATES?
WORKSHOP PARTICIPATION BY DISCIPLINE

Data from 2002-2014
Early Career Workshop Participants
n=632

Marine 10%
Atmos 9%
Other 6%
Geo 75%

For comparison…

2011 On the Cutting Edge Survey of Faculty

Geo 71%
Ocean 9%
Atmos 8%
Other 14%
WHO PARTICIPATES?

Male 49%
Female 51%

For comparison, in the geosciences…

23% female assistant professors
(2008 AGI report)

36% female @ PhD institutions
(Holmes et al., 2015
based on 2010-2011 data)

Data from 2002-2014
Early Career Workshop Participants
N=685
NUMBER OF WORKSHOP PARTICIPANTS

![Graph showing the number of workshop participants from 2002 to 2015. The graph indicates a general increase in participants over the years, with a peak in 2009, and a slight decline in 2014.](image-url)
How has your confidence in your ability to succeed in an academic career been affected by your participation in this workshop?

2014 responses to end-of-workshop survey question
I felt like a sponge throughout the week. I've gained so much in terms of concrete things to implement and a holistic appreciation for this career. I can totally do this, and this workshop instilled that confidence.

Participant quote from end-of-workshop survey
The ability to freely exchange ideas about ... learning activities, classroom management strategies, funding opportunities, proposal improvement, and collaboration with such a talented and diverse group of people was unlike anything I have yet experienced.

I am heading back to my institution feeling that I am better equipped to be a more efficient and effective teacher, researcher, colleague, father, husband, and community member.

Participant quotes from end-of-workshop survey
WORKSHOP FOR EARLY CAREER GEOSCIENCE FACULTY: TEACHING, RESEARCH & MANAGING YOUR CAREER

July 24-28, 2016
University of Maryland
with an optional visit to NSF on Friday, July 29

Conveners: Rachel Beane, Bowdoin College
Tessa Hill, University of California - Davis
Sarah Penniston-Dorland, University of Maryland

Application Deadline: March 16, 2016

Workshop sessions on effective teaching strategies, course design, establishing a research program, working with research students, writing strong proposals, balancing professional and personal responsibilities, task management and strategic planning.

http://serc.carleton.edu/NAGTWorkshops/earlycareer