



## National Effective Teaching Institutes, 2018

Dear Colleague:

I am pleased to announce **two** workshop opportunities for your faculty. The 35<sup>th</sup> National Effective Teaching Institute (NETI-1) will be held August 1<sup>st</sup>- 3<sup>rd</sup>, 2018, at the Hilton Double Tree Hotel in Philadelphia, PA. For faculty with more teaching experience, an advanced teaching workshop (NETI-2) will be offered June 28<sup>th</sup> -29<sup>th</sup>, 2018 at the Hilton in Salt Lake City, UT. Drs. Susan Lord, Matt Ohland, and Michael Prince will lead each workshop. Topics to be covered are listed on the accompanying outlines. The previous NETI programs have reached over 1500 participants from 250 different schools and participant evaluations have been overwhelmingly positive.

Participants for each NETI workshop will include 50 faculty members from all branches of engineering and engineering technology. The registration fee for the 3-day NETI-1 is \$1150 per participant and for the 2-day NETI-2 is \$1050. This fee covers organization and presentation costs, participant notebooks, breakfasts, lunches, and breaks. Attendees' institutions are expected to cover the participants' expenses for transportation, lodging, and one meal per day.

You are invited to nominate up to two of your faculty members for **each** workshop. (Note that we are sending this invitation to both deans and associate deans, so those two individuals should coordinate their nominations.) Candidates for NETI-1 should have had at least one semester of college teaching experience before attending the workshop. Candidates for NETI-2 should be experienced with using the basic active learning techniques covered in NETI-1 and be ready to adopt more challenging techniques such as cooperative and problem-based learning. In general, these will be faculty with more teaching experience, but instructors at all age and career levels are welcome at either workshop, so long as they have the appropriate background.

Please return a copy of the enclosed registration form and payment information for the registration fee. If your institution decides to send a check, please have it made out to ASEE/NETI at the attention of Heather Deale at your earliest convenience. If it is more convenient for you, you can send a completed application as a PDF to me at [h.deale@asee.org](mailto:h.deale@asee.org). *We will accept up to 50 applications on a first-come, first-served basis.* We will contact your nominees directly by e-mail to give them further details about the workshop. If your institutional policies make it difficult for you to prepay, please have the nominees send a personal check made out to ASEE/NETI, and note if it is for NETI-1 or NETI-2. We will issue a receipt so your institution may reimburse them.

We look forward to hearing from you. If you have any administrative questions, please contact Heather Deale at ASEE headquarters via email ([h.deale@asee.org](mailto:h.deale@asee.org)). For questions about the workshop content, please contact Dr. Michael Prince at [prince@bucknell.edu](mailto:prince@bucknell.edu)

Sincerely,  
Heather Deale  
Program Coordinator  
[h.deale@asee.org](mailto:h.deale@asee.org)

**NATIONAL EFFECTIVE TEACHING INSTITUTE (NETI-1B)****August 1<sup>st</sup> – 3<sup>rd</sup> 2018****Philadelphia, PA****Susan Lord, Co-Director | University of San Diego****Matt Ohland, Co-Director | Purdue University****Michael Prince, Co-Director | Bucknell University**

NETI-1 has several goals. Primarily, it is intended to give the participants information and hands-on practice in elements of effective teaching. It is also intended to provide new faculty with tips on getting their careers off to a good start and experienced faculty with instructional materials and methods that they can use in faculty development and new faculty mentoring programs on their own campuses. Participants will be given opportunities throughout the workshop to plan applications of those techniques in a course they teach.

**Day 1: 8:30 am–4:30 pm**

- Workshop preview and introductions
- Motivating students and student learning
- Writing learning objectives and using them to guide course planning, instructional design, and assessment of learning
- Active learning techniques: Ways to engage students that increase learning while minimizing student resistance, even in large classes
- Crisis clinic

**Day 2: 8:30 am–4:30 pm**

- Inclusive pedagogies
- Using inductive teaching methods (inquiry-based, problem-based learning, and project-based learning) to promote conceptual understanding
- Assessment of learning: Designing quantitative tests that are rigorous but fair. Assessing written and oral project reports efficiently, effectively, and fairly. Course grading.
- Breakout sessions
  - Getting your faculty career off to a good start
  - Promoting effective teaching on your home campus

**Day 3: 8:30 am–3:00 pm**

- Assessment (continued)
- Crisis clinics
- Final course planning exercise; Using workshop materials to redesign a more engaging and effective course
- Participant presentations
- Wrap-up

**ADVANCED NATIONAL EFFECTIVE TEACHING INSTITUTE (NETI-2)****June 28<sup>th</sup> – 29<sup>th</sup>, 2018****Salt Lake City, Utah****Susan Lord, Co-Director | University of San Diego****Matt Ohland, Co-Director | Purdue University****Michael Prince, Co-Director | Bucknell University**

NETI-2 is designed to add to the pedagogical expertise of engineering instructors who are knowledgeable about the subjects covered in NETI-1 (course planning, effective lecturing and active learning, and assessment of learning, among other topics). Two instructional approaches will provide the foundation for the workshop content: *cooperative learning* and *inductive teaching and learning* (inquiry-based and problem-based learning). Topics covered for each technique will include definitions, learning benefits and the research base that demonstrates them, implementation suggestions, problems that may arise in implementation and how to avoid them, and how the methods can be used to address ABET Outcomes and promote development of conceptual understanding and high-level thinking and problem-solving skills. Participants will be given opportunities throughout the workshop to plan applications of those techniques in a course they teach.

**Day 1: 8:00–5:00**

- **Overview of learner-centered instruction** (active and inductive teaching and learning) **and outcomes-based education** (learning objectives and outcomes)
- **Cooperative learning (CL)**
  - Defining criteria of CL, research base, and structures
  - Forming teams and meeting the defining criteria in lecture, lab, and project-based courses
  - Assessing team products and individual contributions to them
  - Helping students develop teamwork skills
  - Dealing with student resistance
- **Introduction to inductive teaching and learning.** Inductive methods (inquiry-based learning, project- and problem-based learning, case-based instruction, just-in-time teaching). Similarities and differences, pros and cons, and research base.

**Day 2: 8:00–3:00**

- **Inquiry-based and problem-based learning (PBL)**
  - Applying inquiry-based methods to any topic in any course
  - Pitfalls in inquiry-based learning and how to avoid them
  - Applying PBL to any topic in any course
  - Pitfalls in PBL and how to avoid them
  - Using inquiry and PBL to help students acquire critical and creative thinking skills and deep conceptual understanding
  - Dealing with student resistance
- **Final synthesis and goal-setting exercise**