Questions or Comments?

Type them into the questions box!

"Why am I muted?"
Don't worry. Everyone is muted except the Presenter and the Host. Thank you and enjoy the show.

Chat

Announcements and hyperlinks from our team
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A Career Planning Tool For Chemical Scientists

ChemIDP is an Individual Development Plan designed specifically for graduate students and postdoctoral scholars in the chemical sciences. Through immersive, self-paced activities, users explore potential careers, determine specific skills needed for success, and develop plans to achieve professional goals. ChemIDP tracks user progress and input, providing tips and strategies to complete goals and guide career exploration.

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ACS Scholar Adunoluwa Obisesan
BS, Massachusetts Institute of Technology, June 2021
(Chemical-biological Engineering, Computer Science & Molecular Biology)

“The ACS Scholars Program provided me with monetary support as well as a valuable network of peers and mentors who have transformed my life and will help me in my future endeavors. The program enabled me to achieve more than I could have ever dreamed. Thank you so much!”

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ACS OFFICE OF DEIR
Advancing ACS’ Core Value of Diversity, Equity, Inclusion and Respect

Resources

- Inclusivity Style Guide
  Designed to help staff and members use language and images that respect diversity in all forms.

- ACS Webinars on Diversity
  Covering diversity and inclusion in the workplace.

- ACS Volunteer and ACS Meetings Code of Conduct
  Including a position and welcoming environment for attendees, volunteers, and staff.

- ACS Publications DEIR Hub
  See what ACS Publications is doing for fostering inclusivity in scholarly publishing.

- Publications DEIR Educational Resources
  Download this educational guide for additional recommendations on index, records, benefited, and more on diversity, inclusion and related topics.

- Quick Guide: Inclusion Moments
  Learn more about what inclusion moments and are and ideas to host them during your meetings.

- Quick Guide: How to host inclusive in-person events
  Recommendations and best practices to ensure that your events can accommodate everyone.

Diversity, Equity, Inclusion, and Respect

**Diversity**
The representation of varied identities and differences (race, ethnicity, gender, disability, sexual orientation, gender identity, national origin, age, class, socio-economic status, thinking and communication styles, etc.) collectively and as individuals. ACS seeks to proactively engage, understand, and draw on a variety of perspectives.

**Equity**
Ensures fair treatment and equal opportunity, and names in access to information and resources for all. We believe there is only possible in an environment built on respect and dignity. Equity requires the identification and elimination of barriers that have prevented the full participation of some groups.

**Inclusion**
Cultures a culture of belonging by actively inviting the contributions and participation of all people. Every person’s input adds value, and ACS strives to ensure balance in the face of power differences. In addition, no one person can or should be called upon to represent an entire community.

**Respect**
Ensures that each person is treated with professionalism, integrity, and ethics undergirding all interpersonal interactions.

https://www.acs.org/diversity
Looking for a new science podcast to listen to?

Tiny Matters

Check out Tiny Matters, from the American Chemical Society.

Sam Jones, PhD
Science Writer & Exec Producer

Deboki Chakravarti, PhD
Science Writer & Co-Host

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visit http://www.acs.org/tinymatters or scan this QR code
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- ACS Industry Matters

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Preview Content: [acs.org/indn](https://acs.org/indn)

- ACS Innovation Hub LinkedIn Group

Connect, collaborate and stay informed about the trends leading chemical innovation.

ACS on Campus is the American Chemical Society’s initiative dedicated to helping students advance their education and careers.

acsocampus.acs.org

ACS Career Resources

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https://www.acs.org/careerconsulting.html

Personal Career Consultations

https://www.acs.org/careerconsulting.html

LinkedIn Learning

https://www.acs.org/linkedInlearning
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**Fundamentals of Intellectual Property for Scientists**
Wednesday, July 19, 2023 | 2-3pm ET
Co-produced with ACS Division of Chemistry and the Law

**The Art of Securing Research Funding: Crafting Effective Grant Proposals**
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**Fundamentals of Intellectual Property for Scientists**
Wednesday, August 2, 2023 | 2-3pm ET
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THIS ACS WEBINAR® WILL BEGIN SHORTLY...

👋 Say hello in the questions window!

How Student Feedback Can Help Us Teach Better

VALERIE WRIGHT, PhD
Director of Diversity, Equity, and Inclusion, American Sociological Association

EMILY MILLER, PhD
Deputy Vice President for Institutional Policy, Association of American Universities

KEVIN GABLE, PhD, MS
Professor Emeritus, Oregon State University

This ACS Webinar ® is co-produced with ACS Education and the Society Committee on Education.
How Students Can Help Us Teach Better: Moving Beyond Student Ratings

- Kevin Gable, Oregon State University
- Valerie Wright, American Sociological Association (ASA)
- Emily Miller, Association of American Universities (AAU)

This ACS Webinar is co-produced with the Society Committee on Education (SOCED) and ACS Education.


Link to resource list: https://www.acs.org/content/dam/acsorg/acs-webinars/2023/Slides/2023-07-13-student-feedback-acsedu1-resources.pdf

Audience Survey Question

Which of the following best describes you?

- Undergraduate student
- Graduate student
- Instructor
- Administrator
- Other (Let us know in the questions box)

* If your answer differs greatly from the choices above tell us in the chat!
A shifting educational landscape

As we’ve learned more about how people learn, we are…

• Shifting vocabulary from teaching to learning
• Shifting focus from being educator-oriented to being student-oriented
• Shifting roles of educators from being the expert to being the guide
• Shifting pedagogical approaches from being passive to being active
• Shifting assessments from being evaluative to being formative, as well as evaluative

A decade of questioning and learning

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>Launch of AAU’s USEI</td>
</tr>
<tr>
<td>2012</td>
<td>2012 Joint project with AAU and CSC</td>
</tr>
<tr>
<td>2016</td>
<td>2016: Workshop “Implementing Effective Evaluation of Teaching and Learning in STEM”</td>
</tr>
<tr>
<td>2017</td>
<td>2017: Publication “Implementing Effective Evaluation of Teaching and Learning in STEM”</td>
</tr>
</tbody>
</table>

American Chemical Society

AAU = Association of American Universities; ASA = American Sociological Association; NASEM = National Academies of Sciences, Engineering, and Medicine
National Academies Collaborations with Partner Organizations


- National Dialogue on Transforming STEM Teaching Evaluation in Higher Education Virtual Workshop (Jan 2021)

A collection of activities across ACS

1. **Statement on Student Evaluations of Teaching**
   - American Sociological Association
   - September 2019

2. **Science Education Policy**
   - [https://www.acs.org/policy/publicpolicies/education/educationpolicies.html](https://www.acs.org/policy/publicpolicies/education/educationpolicies.html)

3. **Journal of Chemical Education**
   - [https://pubs.acs.org/journal/jceda8](https://pubs.acs.org/journal/jceda8)

4. **Vision**
   - Advancing chemistry education for all

   **Mission**
   - Develop and promote policies, resources and programs that advance chemistry education for all

   **Goals**
   - Goal 1: Foster a culture of innovation and integrity in chemistry teaching, learning, assessment, and measured research.
   - Goal 2: Advance inclusive excellence for all learners and educators.
   - Goal 3: Support and recognize chemistry educators and mentors.

   [https://americanchemicalsociety-my.sharepoint.com/:p:/g/personal/j_wesemann_acs_org/EfsR7esfJBZOiNq-7HdR5siMBZ7zgYcBhjQZFLFMnEIrDFw?e=Y8NG2b](https://americanchemicalsociety-my.sharepoint.com/:p:/g/personal/j_wesemann_acs_org/EfsR7esfJBZOiNq-7HdR5siMBZ7zgYcBhjQZFLFMnEIrDFw?e=Y8NG2b)
What You Will Learn

- What are the risks associated with student ratings and evaluations of teaching
- How can we obtain student feedback effectively
- What are the steps for implementing student feedback mechanisms

Student evaluations of teaching…
are used for evaluation

- SETs do not measure teaching effectiveness
  - Meta-analysis of faculty's teaching effectiveness: Student evaluation of teaching ratings and student learning are not related (White and Gonzalez, 2017).

- Biases in SET's hinders faculty diversity on campuses
  - Impacts tenure, promotion, and contract renewals
  - Reduces number of underrepresented role models for students
How is end-of-course feedback from students used in courses offered on your campus? (check all that apply)

- Used for improvement
- Used for formal evaluation
- Not collected
- Other (Let us know in the questions box)

* If your answer differs greatly from the choices above tell us in the chat!

---

Direct Gender Bias in Student Evaluations
- Rated lower even in online experiments
  - [What’s in a Name: Exposing Gender Bias in Student Ratings of Teaching](MacNell, Driscoll, and Hunt, 2015).

More likely to be referred to as teachers rather than professors
- [Women Are Teachers, Men are Professors: A Study of Student Perceptions](Miller and Chamberlin, 2000).

Rated lower than male instructors despite similar learning outcomes
- [Persistent Inequity: Gender and Academic Employment](Curtis, 2011).
- [Gender biases in student evaluations of teaching](Boring, 2017).
Student evaluations of teaching… are biased toward women

• Indirect Gender Bias in Student Evaluations
  – Most likely to show up in open-ended questions
  – Students tend to evaluate personality, manners, and appearance
  – Students expect women to be more helpful and sensitive
  – Women are evaluated more closely than men

• Evaluating Student Evaluations of Teaching: a Review of Measurement and Equity Bias in SETs and Recommendations for Ethical Reform (Kreitzer and Sweet-Cushman, 2022).

Student evaluations of teaching… are biased toward minorities

• Students rate minority faculty more negatively than whites
• Reduces career pipelines
  – leads to higher attrition and lower achievement
• Blacks (particularly black men) and Asians receive the lowest evaluations

• The role of perceived race and gender in the evaluation of college teaching on RateMyProfessors.Com (Reid, 2010).
Reducing bias in student evaluations of teaching

- Focus on feedback not ratings
- Avoid comparing faculty to department means
- Use specific questions
- Eliminate open-ended qualitative comments
- Interpret with caution

What approaches are you using to give or get student feedback?
(check all that apply)

- Activities embedded into course
- Student surveys during course
- End of course student surveys
- End of course student evaluations of teaching
- Other (Let us know in the questions box)

* If your answer differs greatly from the choices above tell us in the chat!
A Focus on Faculty Rewards Systems

Reform in teaching evaluation is one essential ingredient in creating institutional cultures that allow a more meaningful and deliberate balance between teaching and research, specifically when it provides fair and equitable measures of teaching effectiveness as well as actionable guidance on teaching practice.
AAU Teaching Evaluation Learning Community

Funded by the Sarah Gilbert & Carl Wieman Charitable Fund and the Howard Hughes Medical Institute, the learning community and teaching evaluation demonstration projects aim to:

- Influence the way faculty members view their teaching responsibilities
- Implement more effective and holistic models to evaluate teaching
- Create better systems to recognize and reward evidence-based and equitable educational practices
- Integrate concepts of justice and equity into the faculty rewards system

KU - Chemical & Petroleum Engineering

Goal: Develop and assess a new system for teaching evaluation that aligns with evidence-based inclusive practice, relies on multiple sources, and overlaps with other departmental processes.

Key Features:
1. Create Faculty Peer Triads

Builds On: A model developed and tested in TEval/Benchmarks project.

2. Empower Teaching Evaluation Committee to utilize multidimensional rubric to assess teaching effectiveness

Project Leads:
Susan Williams & Prajna Dhar, Chemical & Petroleum Engineering
Andrea Follmer Greenhoot, Center for Teaching Excellence

Graphic developed by the KU Center for Teaching Excellence
Rubric Integrated into Evaluation Structure

Benefits of Proposed System:
- Captures evidence from multiple sources
- Utilized in annual and multiyear evaluation
- Reduces bias and is more equitable
- Encourages use of effective practices known to support learning and inclusion in students
- Contributes to other vital departmental processes:
  • Community building
  • Cross-course coordination
  • Assessment and improvement of student learning and equity at the degree level

Assessment and Iterative Improvement of the System:
- Is it reliable, feasible and sustainable?
- Does it diminish bias?
- Does it support improved teaching and learning?

Students provide a unique perspective on a course.

https://scs.arizona.edu/
Students as Instructional Coaches

https://www.amacad.org/publication/becoming-better-college-teacher-if-youre-lucky

A moment for reflection

“What is the most informative student feedback you have received?”
Resources

Next Event on August 10 @ 2pm ET!

MEET THE EXPERTS

Amy Fuller
Assistant Professor of Chemistry;
University of Hawaii-Manoa

André Silva Pimentel
Chemistry Associate Professor and
Graduate Coordinator; Pontifica
Universidade Católica do Rio de Janeiro

Kirk Scharoe
Editor-in-Chief, ACS Applied Materials &
Interfaces; Chemistry Chair and
Professor, University of Texas at San
Antonio

Damián Cooper
Student Liaison, ACS Undergraduate
Student Advisory Board

Alisha Tittle
Student Liaison, ACS Undergraduate
Student Advisory Board

The Live Q&A is about to begin!
Keep submitting your questions in the questions window!

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