

# Involvement in and Perception of Atmospheric Science Education Research

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## **Involvement in and perception of atmospheric science education research (IPASER) survey**

The Scholarship of Teaching and Learning (SoTL) is a close investigation into student learning, with the goal of improving teaching and/or student learning. Generally, findings are shared publicly at conferences, workshops, or in newsletters.

Discipline-based education research (DBER) is a systematic collection and analysis of data focused on teaching and learning. Results can be generalized beyond a single course and may lead to the development of new teaching methods or activities. This work is typically published in peer-reviewed journals.

**For this survey, the term "education research" will be used to refer to both SoTL and DBER activities.** In addition, terms such as "teaching", "learning" and "student" can refer to either formal education (classroom-based) or informal education (after-school programs, community-based organizations, museums, libraries, etc.).

### **Section 1: Motivation/Interest**

Q1.1 What is your interest level in each of the following?

- a) Developing questions about student learning
- b) Exploring questions about student learning
- c) Finding collaborators with whom to pursue my interests in education research
- d) Attending a talk/session devoted to education research at a discipline-based conference
- e) Presenting education research at a discipline-based conference
- f) Using a website to share/find resources for research-based teaching in the atmospheric sciences
- g) Helping to establish an education research community in atmospheric science

- Very Interested
- Moderately Interested
- Somewhat Interested
- Not Interested

Q1.2 How important is research that investigates teaching practices and student learning within the field of atmospheric sciences?

- Very important
- Moderately important
- Somewhat important
- Not important
- I don't know

Q1.3 For each time period below, select ALL of the activities in which you participated.

BEFORE January 1st, 2018

AFTER January 1st, 2018

- Investigation of questions about teaching and learning within my own classroom/event.
- Investigation of questions about teaching and learning for multiple classes/events.
- Presented my education research at a discipline-based conference.
- Attended a talk/session devoted to education research at a discipline-based conference.

Teaching is defined as helping others acquire knowledge. This includes formal education (K-12 classroom, college classroom, etc.) and informal education (after-school programs, community-based organizations, outreach events, museums, libraries, public lectures, etc.).

Q1.4 Does your current position require you to teach?

- Yes
- No

Q1.5 If you have any thoughts pertinent to Atmospheric Science Education Research that were not covered in the questions above, please enter them here: \_\_\_\_\_

## **Section 2: Merit**

Q2.1 At your *current* institution, what carries the most weight for *promotion*?

If your contract is equally divided among two or more of the following options, select ALL that apply.

- Research
- Teaching
- Departmental service
- College/University service
- Outreach
- Administration
- Other. Please specify.

Q2.2 How much weight *should* education research carry when it comes to *promotion*?

- Significant weight
- Moderate weight
- Little weight
- No weight

Q2.3 At your *current* institution, what carries the most weight for *tenure*?

If your contract is equally divided among two or more of the following options, select ALL that apply.

- Research
- Teaching
- Departmental service
- College/University service
- Outreach
- Administration
- Tenure does not apply to my position.
- Other. Please specify.

Q2.4 How much weight *should* education research carry when it comes to *tenure*?

- Significant weight
- Moderate weight

- Little weight
- No weight

Q2.5 For your *current* position, in which category would a *conference presentation* on education research fall? Select ALL that apply.

- Research
- Teaching
- Departmental service
- College/University service
- Outreach
- Administration
- Other. Please specify.

Q2.6 For your *current* position, in which category would a *peer-reviewed journal publication* on education research fall? Select ALL that apply.

- Research
- Teaching
- Departmental service
- College/University service
- Outreach
- Administration
- Other. Please specify.

Q2.7 At your *current* institution, how would those making the decisions for tenure and promotion view your *conference presentation* on education research as compared to a conference presentation on research that was not related to education in atmospheric science?

- Less favorably
- Both presentations would be given equal weighting
- More favorably
- Other. Please explain.

Q2.8 At your *current* institution, how would those making decisions for tenure and promotion view your *peer-reviewed journal publication* on education research as compared to a peer-reviewed journal publication on research that is not related to education in atmospheric science?

- Less favorably
- Both presentations would be given equal weighting
- More favorably
- Other. Please explain.

Q2.9 Thinking about how the majority of your colleagues value education research, how risky is participating in education research within your current position (with regard to tenure, promotion, overall time allotment, etc.)?

- Significant risk
- Moderate risk

- Little risk
- No risk

Q2.10 Do you think that the education research in the atmospheric science community is valued:

- More than it should be
- Appropriately
- Less than it should be

### Section 3: Resources

Q3.1 Have you ever received any training related to teaching and learning (e.g., classes, workshops, etc.)?

- Yes
- No

Q3.1.1 Please describe your most valuable training experience related to teaching and learning.

Q3.2 Have you participated in a professional development opportunity related to teaching and learning?

- Yes
- No

Q3.2.1 Please describe your most valuable professional development opportunity related to teaching and learning.

Q3.3 At your **current** institution/organization, what resources are **available** to help you improve your teaching practices? Select ALL that apply.

- Center for Teaching and Learning
- Center for the Integration of Research, Teaching and Learning (CIRTL)
- Professional development workshops
- Graduate student teaching assistant training or orientation
- Graduate student teaching certificate or formal training program
- I am not aware of any resources available to me
- Other. Please specify.

Q3.4 What resources have you **used** to help improve your teaching practices? Select ALL that apply. Include resources from your **current and previous** institution/organization.

- Center for Teaching and Learning
- Center for the Integration of Research, Teaching and Learning (CIRTL)
- Professional development workshops
- Graduate student certificate or formal training program
- Online curriculum

- Webinar
- I have not used any resources to improve my teaching practices
- Other. Please specify.

Q3.5 In what way(s) do you receive feedback on your teaching? Select ALL that apply.

- Student evaluations
- Peer evaluations
- Formal mentorship program
- Informal discussion with my colleagues
- Assessment of University/College/major outcomes
- Other. Please specify.

Q3.6 On average, how often do you receive feedback on your teaching?

- Multiple times during the semester
- Once during the semester
- Once per year
- I do not receive feedback on my teaching.
- Other

Q3.7 Would your department/institution provide some funding for your conference presentation on education research?

- Yes, complete coverage
- Yes, partial coverage
- No
- I don't know

Q3.7.1a Is funding for your conference presentation related to education research separate from other funds (i.e., professional development fund)?

- Yes
- No
- I don't know

Q3.7.1b Is funding for your conference presentation related to education research separate from other funds (i.e., professional development fund)?

- Yes
- No
- I don't know

Q3.8 Would your department/institution provide some funding for you to attend a conference/workshop on education research?

- Yes, complete coverage
- Yes, partial coverage
- No
- I don't know

Q3.8.1 Is funding for you to *attend* a conference/workshop on education research separate from other funds (i.e., professional development fund)?

- Yes
- No
- I don't know

Q3.8.1 Is funding for you to *attend* a conference/workshop on education research separate from other funds (i.e., professional development fund)?

- Yes
- No
- I don't know

Q3.9 Have you successfully obtained *external funding* for an education research project?

- Yes
- No
- I don't know (approval pending).

Q3.9.1 Who funded your project?

Q3.10 Have you ever had a paper regarding an education research project published?

- Yes
- No

Q3.10.1 Where did you publish your education research project(s)? Please select ALL that apply.

- Journal of Geoscience Education
- Bulletin of American Meteorological Society
- In the Trenches (National Association of Geoscience Teachers)
- Other. Please specify.

#### **Section 4: Demographics**

Q4.1 What sex were you assigned at birth, such as on your original birth certificate?

- Female
- Male
- I prefer not to answer

Q4.2 How do you describe yourself?

- Female
- Male
- Trans female/Trans woman
- Trans male/Trans man
- Genderqueer/Gender NonConforming
- I prefer not to answer

- Prefer to self-describe

Q4.3 What is your age?

- 18-24
- 25-34
- 35-44
- 45-54
- 55-64
- 64+

Q4.4 Which of the following would you use to describe yourself? Select ALL that apply.

- Native Hawaiian or Other Pacific Islander
- American Indian or Alaska Native
- Middle Eastern or North African
- Hispanic, Latino or Spanish origin
- Black or African American
- East Asian
- South Asian
- White
- I don't know.
- I prefer not to say.
- Other. Please specify.

Q4.4.1 Which of the following describes your Hispanic, Latino, or Spanish origin?

- Mexican, Mexican American, Chicano
- Puerto Rican
- Cuban
- I don't know.
- I prefer not to say.
- Another Hispanic, Latino, or Spanish origin:

Q4.5.1 How does the institution with which are you affiliated fit into the **Carnegie Classification of Institutions of Higher Education?**

- Associate's College
- Baccalaureate College
- Master's Colleges and Universities
- Doctoral Universities
- Does not apply
- Other

Q4.5.2a Is your institution considered an R1, R2 or R3 university?

- R1 - highest research activity
- R2 - higher research activity
- R3 - moderate research activity



Q4.5.2b Is your institution considered an M1, M2, or M3 college/university?

- M1 – Larger programs
- M2 – Medium programs
- M3 – Smaller programs

Q4.6 Which of the following describes your current position? Select ALL that apply.

- Administration
- Research Scientist
- Post Doc
- Graduate Student
- Adjunct Professor
- Professor (Please specify rank)
- Professor of Practice (Please specify rank)
- Visiting Professor (Please specify rank)
- Academic Professional (Please specify rank)
- Other. Please specify.

Q4.7 Which of the following duties are you responsible for in your current position? Check ALL that apply.

- Research
- Teaching
- Departmental service
- College/University service
- Outreach
- Administration
- Other. Please specify.

Q4.8 In which area are you expected to spend the majority of your time? Only select two if your appointment is evenly split (i.e., 50/50).

- Research
- Teaching
- Departmental service
- College/University service
- Outreach
- Administration
- Other (as specified in previous question)

Q4.9 What is your tenure status at your place of employment?

- I am tenured
- I am on the tenure track but not yet tenured
- I am not on the tenure track (includes non-tenure track jobs)

Q4.10 What is the highest degree you have received? If currently enrolled, highest degree received.

- High school graduate, diploma or the equivalent (for example: GED)
- Some college credit, no degree
- Trade/technical/vocational training
- Associate degree
- Bachelor's degree
- Master's degree
- Doctoral degree
- Other. Please specify.

Q4.11 Of which professional organization(s) are you a member? Check ALL that apply.

- American Meteorological Society (AMS)
- American Geophysical Union (AGU)
- American Association of Geographers (AAG)
- National Association of Geoscience Teachers (NAGT)
- National Weather Association (NWA)
- Other. Please specify.