

**UC Riverside**  
**RESEARCH INFORMED CONSENT**

***Title of research study: “Show me the data”: Exploring the impact of observation protocol data in changing instructor motivation and practice (NSF IUSE 2236318)***

***Investigator: Dr. Richard Edwards***

Researchers:	<p>Richard Edwards, Executive Director for the Center for Teaching &amp; Learning XCITE Center for Teaching and Learning (951) 827-9053, <a href="mailto:richard.edwards@ucr.edu">richard.edwards@ucr.edu</a></p> <p>Annie Ditta, Associate Professor of Teaching Dept. of Psychology (951) 827-5384, <a href="mailto:annied@ucr.edu">annied@ucr.edu</a></p> <p>Lauren Levitt, Postdoctoral Scholar XCITE Center for Teaching and Learning (205) 790-3334, <a href="mailto:lauren.levitt@ucr.edu">lauren.levitt@ucr.edu</a></p>
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***Key Information about This Research Study***

This section provides highlights of this research study to help you decide whether or not you should participate. Carefully consider this information and the more detailed information provided below the section. Please ask questions about any of the information you do not understand before you decide whether to participate.

- **Purpose:** This is a research study about the effects of giving instructors data about their own teaching practices, which we will obtain through classroom observations, using various different methods. We will see how that data affects their motivation to change their teaching practices and the extent to which it actually changes their teaching practice.
- **Procedures:** Participation in this study will involve filling out a survey on yourself, your teaching history and motivation. A postdoctoral scholar will schedule an introductory meeting to explain the study, discuss your teaching goals, and identify areas for feedback. Next, the postdoctoral scholar will observe and videotape two weeks of one of your classes. You will also fill out a second online survey on your motivation, and the postdoctoral scholar will meet with you to provide a teaching consultation, show you data about your teaching practices, and discuss your interpretation of that data and what, if anything, you plan to change about your teaching. This meeting will be audio-recorded upon your consent. The postdoctoral scholar has been trained by your institution’s teaching and learning center in observation classes and giving

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consultations. We will also contact you to complete a third survey and follow-up interview about your teaching ideas and practices in one or two years. This follow-up interview will be audio-recorded upon your consent. It is expected that your participation will last a total of 4 hours (20 minutes for each survey and 1 hour for each meeting).

- **Risks:** Risks of this study are minimal. Some of the foreseeable risks or discomforts of your participation include discomfort with being observed and videotaped by a postdoctoral scholar and dissatisfaction with one's teaching practices, as revealed by the classroom observation data. The most serious risks include the potential for the loss of confidentiality, particularly in regards to your faculty colleagues. However, this risk will be rare because we will take many steps to mitigate this risk, as described later in this document.
- **Benefits:** You may benefit from this research. Some of the benefits that may be expected include receiving a consultation about your teaching, which you can use to improve your instructional practices. You will also receive data documenting your teaching practices, which you may be able to use in your teaching portfolio as evidence that you teach in certain ways or as evidence that you are trying to reflect on and grow your teaching. In addition, the investigators may also learn more about how college STEM instructors interpret classroom observation data and the extent to which that data motivates instructors to change their teaching practices. That may lead to better knowledge about how to help instructors improve their teaching, which in turn may lead to better teaching and better student outcomes nationwide.
- **Alternatives:** Instead of being in this research study, your choices may include receiving a standard classroom observation and teaching consultation with your institution's teaching and learning center. Your alternative to participating in this research study is to not participate.
- **Compensation:** You will be paid \$200 in the form of a gift card for your participation.
- **Voluntary Participation:** Your participation in this study is voluntary. You can decide to participate or not to participate, or to withdraw from it at any point without penalty or loss of benefits to which you are otherwise entitled to or already have.

The remainder of this form contains a more complete description of this study.

## ***Purpose***

You are being asked to participate in a research study. This is a research study about faculty development in teaching. The study researcher Lauren Levitt from the UCR XCITE Center for Teaching and Learning will explain this study to you.

You are being asked to take part in this study because you are the instructor of record of a UCR STEM (science, technology, engineering, mathematics) course with 60 or more students.

## ***Study Sponsor***

The study does not have a study sponsor. It is funded by the National Science Foundation.

## ***Investigator Financial Conflict of Interest***

No one on the study team has a disclosable financial interest related to this research project.

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***What happens if I say yes, I want to be in this research?***

If you decide to participate in this research study, the researchers will ask you to:

- Prior to the start of the quarter, you will complete an online survey about yourself, your teaching experiences and motivation. Additionally, the postdoctoral scholar will schedule a 30-minute introductory meeting with you in a private space in the XCITE Sandbox or your private office on campus, whichever you prefer. During this meeting, they will explain the study, discuss your teaching goals and help you identify areas you would like feedback on your teaching.
- In weeks 2 or 3 of the quarter, the postdoctoral scholar will observe and videotape a week's worth of the course that you teach (i.e., 3 class sessions for a course that meets 3 times a week or 2 class sessions for a course that meets twice a week). The postdoctoral scholar will ask for a copy of your syllabus to choose class sessions where there are no exams or other special activities.
- In weeks 5 or 6, the postdoctoral scholar will schedule an hour long debrief meeting with you in a private space in the XCITE Sandbox or your private office on campus, whichever you prefer. They will show you data about your teaching practices from the observed class sessions, ask you about your interpretations of the data, and inquire about what changes, if any, you would like to make in your teaching and how motivated you are to make them. You will be free to ask questions and seek advice about your teaching as well. This teaching consultation is similar to the standard one provided by your institution's teaching and center, except the research team will observe a week of your classes, not just one session, and may provide you with extra data. This meeting will be audio-recorded upon your consent.
- Prior to your debrief meeting, you will complete an online survey about teaching motivation. You may do the survey immediately at the beginning of the in-person debrief meeting or the week prior, whatever you prefer.
- In weeks 8 or 9, the postdoctoral scholar will again observe and videotape a week's worth of the same course.
- One or two years after your observation, you will receive a third online survey and have a follow-up interview, approximately 1 hour in length, with a postdoctoral scholar about your teaching ideas and practices in a private space in the XCITE Sandbox or your private office on campus, whichever you prefer.

You will be "randomized" into one of 5 study groups described below.

- 1. Control group:** You will be observed using only your teaching and learning center's standard observation protocol and will receive information from that protocol.
- 2. CDOP group:** You will be observed using both your teaching and learning center's standard observation protocol and the formal observation protocol Classroom Discourse Observation Protocol (CDOP) (Kranzfelder et al., 2019). CDOP focuses on how instructors speak with students about course content.
- 3. COPUS group:** You will be observed using both your teaching and learning center's standard observation protocol and the formal observation protocol Classroom Observation

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Protocol for Undergraduate STEM (COPUS) (Smith et al., 2013). COPUS focuses on analyzing instructor behaviors during class.

4. **DART group:** You will be observed using both your teaching and learning center's standard observation protocol and the formal observation protocol Decibel Analysis for Research in Teaching (DART) (Owens et al., 2017). DART is an automated algorithm that analyzes classroom noise levels to estimate the time spent in various instructional practices.
5. **PAITE group:** You will be observed using both your teaching and learning center's standard observation protocol and the formal observation protocol Protocol for Advancing Inclusive Teaching Efforts (PAITE) (Addy et al., 2022). PAITE focuses on instructor's inclusive teaching practices.

Randomization means that you are put into a group by chance. It is like flipping a coin. Neither you nor the researchers choose which group you will be in. You will have a 20% chance of being placed in a specific group. You do not need to be familiar with the protocols listed above to participate in this research.

**Study location:** Online surveys will be conducted through the website Qualtrics. The classroom observations will be conducted in the classroom you are teaching. The interviews will take place in a private space in the XCITE Sandbox or your private office on campus, whichever you prefer.

**Number of Participants:** We plan to study 39 people here. The research will include 78 people across all locations.

## ***Is there any way being in this study could be bad for me?***

Participating in this research study may involve risks or discomforts that include:

**Discomfort with being observed or being videotaped:** Some people may feel discomfort about having their classes observed or videotaped. However, we will try to lessen this discomfort by only having non-faculty, such as postdoctoral scholars and students, observe the classes or view the recordings. If you enable lecture capture for your course, which many instructors choose to do, you already experience the risks and discomfort of being recorded. The research team is implementing strict controls (described under the section "Will information about me be kept private?" below) to ensure that as few people as necessary view your recordings.

**Dissatisfaction with your existing teaching practices:** Some people may realize that their current teaching practices may not match their own ideas about how they teach or how they would like to teach, and this realization can be distressing. During the teaching consultation, the postdoctoral scholar will help you channel these feelings productively by thinking about ways you can change your teaching practice.

**Discomfort with being audio recorded:** Some people may feel discomfort about having the interview audio recorded. However, we will try to lessen this discomfort by only having non-faculty, such as postdoctoral scholars and students, listen to or view the recordings. The

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research team is implementing strict controls (described under the section “Risks of Loss of Confidential Information” below) to ensure that as few people as necessary listen to or view your recordings. In addition, you may opt out of being audio recorded.

***Risks of Loss of Confidential Information:*** There is also a risk that information about you could be released to an unauthorized party, particularly to faculty colleagues. This is a serious risk because if that occurred, it could affect tenure or promotion evaluations. Therefore, to minimize this risk, we will implement many controls to ensure that no faculty see data with identifiers. This is a collaborative study between UCSD and UCR. The research teams at each institution will collect and store names, email addresses, video recordings, interview and survey data, and other personally identifiable data in a password-protected shared Google Drive that will only be accessible to postdoctoral and student researchers, not to the faculty members of the research team. A postdoctoral scholar will de-identify the data by removing your name and replacing it with a code and removing any other identifiable information, such as course names and years. The key will be kept on the password-protected Google Drive as well. Faculty members of the research team will only have access to data after it is de-identified. While the faculty researchers may know who is participating in the research, in order to help process compensation, they will not know how any participant teaches or what any participant said. We will also send audio of your classes to an external service for decibel analysis as part of the DART protocol. This service uses secure protocols to store and transmit data.

During the debrief meeting and interview, the postdoctoral researcher will request permission to audio-record your interview. If you agree, this will be transcribed by the online transcription service, Otter.ai. This service uses secure protocols to store and transmit data.

***Possible Unknown Risks:*** In addition, there might be risks that we cannot predict at this time. These unknown risks may be temporary, mild, and last only while you are actively participating in the research, or they may be serious or long-lasting. You will be informed of any new findings that might affect your health or welfare, or might affect your willingness to continue in the research.

### ***Will being in this study help me in any way?***

We cannot promise any benefits to you or others from your taking part in this research. However, possible benefits to you include receiving a consultation about your teaching, which you can use to improve your instructional practices. You will also receive data documenting your teaching practices, which you may be able to use in your teaching portfolio as evidence that you teach in certain ways or as evidence that you are trying to reflect on and grow your teaching. This research may help others by allowing us to learn more about how college STEM instructors interpret classroom observation data and the extent to which that data motivates instructors to change their teaching practices. That may lead to better knowledge about how to help instructors improve their teaching, which in turn may lead to better teaching and better student outcomes nationwide.

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### ***What happens to the information collected for the research?***

Information collected for this research, such as names, email addresses, video recordings, interview and survey data, and other personally identifiable data, will be stored in password-protected Google Drive that will only be accessible to postdoctoral and student researchers, not to the faculty members of the research team. A postdoctoral scholar will de-identify the data by removing your name and replacing it with a code and removing any other identifiable information, such as course names and years. The key will be kept on the password-protected Google Drive as well. Faculty members of the research team will only have access to data after it is de-identified. While the faculty researchers may know who is participating in the research, in order to help process compensation, they will not know how any participant teaches or what any participant said. We will also send audio of your classes to an external service for decibel analysis as part of the DART protocol. This service uses secure protocols to store and transmit data. During the debrief meeting and interview, the postdoctoral researcher will request for permission to audio record your interview. If you agree, this will be transcribed by the online transcription service, Otter.ai. This service uses secure protocols to store and transmit data. If a participant withdraws, their information will be erased from the Google Drive and withdrawn from study analysis.

Identifiers will be removed from identifiable private information. After such removal, the de-identified information could be used for future research studies or distributed to other investigators for future research studies without additional informed consent from the subject or the legally authorized representative.

### ***Will information about me be kept private?***

We will do our best to make sure that the personal information gathered for this study is kept private. However, we cannot guarantee total privacy and if required by the law, your personal information may be disclosed. If information from this study is published or presented at scientific meetings, your name and other personal information will not be used. Authorized representatives from the following organizations may review your research data for the purpose of monitoring or managing the conduct of this study:

- The Institutional Review Board (IRB) that reviewed this research
- Representatives of the National Science Foundation
- Representatives of the University of California

### ***Can I be removed from the study without my OK?***

The person in charge of the research study can remove you from the research study without your approval. Possible reasons for removal include This could happen because you stop teaching your class, your class sessions are cancelled, or for any reason it is not possible to observe your teaching during the appropriate class sessions or to meet with you to give your consultation. You may also be withdrawn from the study if you do not follow the instructions given you by the study personnel. The researcher will notify you if this occurs. If you are withdrawn from the study before the teaching consultation, we are happy to refer you to your institution's teaching and learning center for their standard teaching consultation service.

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***Can I stop being in the study at any time?***

You can stop taking part in the study at any time. If you would like to stop, please email postdoctoral scholar Lauren Levitt at [lauren.levitt@ucr.edu](mailto:lauren.levitt@ucr.edu).

***Will I receive payment for being in this study?***

If you agree to take part in this research study, we will compensate you with a \$200 gift card for your time and effort, after the teaching observations are completed.

The results of this study may have commercial value to UC Riverside, and/or the researchers. Please know you will have no legal or financial interest in any commercial development resulting from the research or from the information or materials collected.

***What else do I need to know?***

If you are interested in receiving the research results following completion of the study, please contact the researcher Lauren Levitt via the email [lauren.levitt@ucr.edu](mailto:lauren.levitt@ucr.edu).

***Whom can I talk to?***

If you have questions, concerns, or complaints, or think the research has hurt you, talk to the research team at Richard Edwards at [richard.edwards@ucr.edu](mailto:richard.edwards@ucr.edu), Annie Ditta at [annied@ucr.edu](mailto:annied@ucr.edu), or Lauren Levitt at [lauren.levitt@ucr.edu](mailto:lauren.levitt@ucr.edu).

If you have questions about your rights or complaints as a research subject, please contact the IRB Chairperson at (951) 827 - 4802 during business hours, or to contact them by email at [irb@ucr.edu](mailto:irb@ucr.edu).

***CONSENT***

You have been given a copy of this consent form to keep.

- Participation in research is voluntary. The decision to participate, or not participate, is solely up to you.
- You have the right to decline to participate in this study without penalty or loss of benefits to which you are otherwise entitled to or already have.
- You have the right to withdraw from this study at any point without penalty or loss of benefits to which you are otherwise entitled to or already have.

If you wish to participate in this study, you should sign below.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Participant's Name (Print)

\_\_\_\_\_  
Participant's Signature for Consent

\_\_\_\_\_  
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This research study includes two interviews where the audio recordings are optional. Please specify below if you wish to be recorded.

\_\_\_ Yes, I give my consent to being audio recorded during the interviews.

\_\_\_ No, I do not give my consent to being audio recorded during the interviews.

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