

Online Survey

Section 1. Background

What type of institution did you attend as an undergraduate student?

- ☐ Research university or institution with Masters and/or Ph.D. as the highest degree in chemistry offered
- ☐ 4-year university or college with Masters as the highest degree in chemistry offered
- ☐ 4-year university or college with BS or BA as the highest degree in chemistry offered
- ☐ Other (please specify) _____

What is your teaching experience? (Check all that apply)

- ☐ I have no teaching experience.
- ☐ I have K-12 teaching experience.
- ☐ I was a laboratory TA in graduate school.
- ☐ I was a recitation TA in graduate school.
- ☐ While in graduate school, I taught lectures when the lecturer/professor was absent.
- ☐ I have taught at a community college.
- ☐ I have taught at a 4-year college or university.
- ☐ I have taught at a PhD-level, research intensive institution.
- ☐ Other (please specify) _____

Please select the year that you received your first faculty appointment.

Drop down menu starting at *Prior to 1970*

Approximately what is the distribution of your appointment? (Total should add to 100%) If a field is Not Applicable, please enter 0.

Teaching (%) _____
Research (%) _____
Service (%) _____

How many courses are you expected to teach per semester?

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4 or more

Have you previously participated in program(s), workshop(s) and/or course(s) on teaching?

- ☐ Yes
- ☐ No

Answer If Yes Is Selected

Please describe the goal of these programs, workshops, or courses.

Please indicate your level of familiarity with each of the following instructional strategies and methods:

[illegible]

	Never heard of it	Heard the name but don't know much else	Familiar but have not used	Familiar and plan to implement	Have used all or part	Currently use all or part
Concept Maps: Students diagram the relationships that exist between concepts.	☐	☐	☐	☐	☐	☐
Formative Assessment: Formal or informal assessments designed to gain timely feedback on students understanding of material and provide opportunity for instructor to modify instruction accordingly.	☐	☐	☐	☐	☐	☐
Concept Tests/inventories: Assessment instruments designed to identify misconceptions.	☐	☐	☐	☐	☐	☐
Student Assessment of their Learning Gains (SALG): Measuring the degree to which a course has enabled student learning.	☐	☐	☐	☐	☐	☐

Please indicate the instructional and assessment strategies/methods that you have experienced as a student: (check all that apply)

- ☐ Think-pair-share
- ☐ Just-in-Time Teaching
- ☐ Peer-instruction
- ☐ Teaching with case studies
- ☐ Process Oriented Guided Inquiry (POGIL)
- ☐ Problem-Based Learning (PBL)
- ☐ SCALE-UP classroom
- ☐ Interactive lecture demonstration
- ☐ Collaborative Learning
- ☐ Cooperative Learning
- ☐ Teaching with computer simulations
- ☐ Teaching with animations
- ☐ Clickers
- ☐ None of the above

Section 3. Communication Channels

Suppose you wanted to get advice about issues concerning teaching. From which source would you turn to for assistance or advice? If you do not have access to the source, choose Not Applicable.

	Not Applicable	Never	Sometimes	Often	Always
Department Chair	☐	☐	☐	☐	☐
Faculty within your department conducting 'bench' research	☐	☐	☐	☐	☐
Faculty within your department conducting research in science education (e.g., biological education, physics education, chemical education)	☐	☐	☐	☐	☐
Lecturer/professor of practice in the department	☐	☐	☐	☐	☐
Science colleague outside your department but at UNL	☐	☐	☐	☐	☐
A colleague in the College of Education (or equivalent) at UNL	☐	☐	☐	☐	☐
Faculty outside UNL conducting 'bench' research	☐	☐	☐	☐	☐

	Not Applicable	Never	Sometimes	Often	Always
Faculty outside UNL conducting research in science education (e.g., biological education, physics education, chemical education)	☐	☐	☐	☐	☐
Your Ph.D. and/or postdoc advisor	☐	☐	☐	☐	☐
Teaching and learning center	☐	☐	☐	☐	☐
Professional association	☐	☐	☐	☐	☐
A K-12 teacher	☐	☐	☐	☐	☐
Educational texts or education-oriented websites	☐	☐	☐	☐	☐
Science education journals (e.g., the Journal of Chemical Education, Physical Review Special Topics - Physics Education Research, CBE-Life Science Education)	☐	☐	☐	☐	☐
The Journal of College Science Teaching	☐	☐	☐	☐	☐
The education section in Science	☐	☐	☐	☐	☐
Other pedagogical journals	☐	☐	☐	☐	☐
Other; please specify _____	☐	☐	☐	☐	☐

How often do you attend talks at the following conferences?

	I have never heard of it	I have heard the name but I have never attended	I have attended it once or twice in the past	I attend this conference regularly	I attend every conference offering	Not Applicable
Science education conferences (e.g., Biennial conference in chemical education, Society for the advancement of biology education research conference, Gordon research conferences in education)	☐	☐	☐	☐	☐	☐
Talks in the education division of your national organization	☐	☐	☐	☐	☐	☐
National and/or regional meeting of the National Science Teachers Association	☐	☐	☐	☐	☐	☐
Other education oriented conferences; please specify	☐	☐	☐	☐	☐	☐

Section 4. Attitudes and Beliefs toward Student-Centered Teaching

For the rest of the questionnaire, we ask that you focus on the course you selected to be videotaped this semester. If you opted out of videotaping, please choose a lower level course that you typically teach. We will call this course "your target course".

Answer If I agree to have my lectures videotaped. True Is Selected

The course you selected is: Text Entry from earlier

Answer If I agree to have my lectures videotaped. False Is Selected

Please write the course catalog name and number of the course you choose to be your target course (e.g., CHEM 109).

This inventory is designed to explore a dimension of the way that academics go about teaching in a specific context or subject or course. This may mean that your responses to these items in one context may be different to the responses you might make on your teaching in other contexts or courses. For this reason, we would like you to focus on your target course. For each item please check the appropriate response. Do not spend a long time on each: your first reaction is probably the best one.

	Rarely or never true	Sometimes true	True about half the time	Frequently true	Almost always or always true
In this course students should focus their study on what I provide them.	☐	☐	☐	☐	☐
It is important that this course should be completely described in terms of specific objectives that relate to formal assessment items.	☐	☐	☐	☐	☐
In my interactions with students in this course I try to develop a conversation with them about the topics we are studying.	☐	☐	☐	☐	☐
It is important to present a lot of facts to students so that they know what they have to learn for this course.	☐	☐	☐	☐	☐
I set aside some teaching time so that the students can discuss, among themselves, key concepts and ideas in this course.	☐	☐	☐	☐	☐
In this course I concentrate on covering the information that might be available from key texts and readings.	☐	☐	☐	☐	☐
I encourage students to restructure their existing knowledge in terms of the new way of thinking about the course that they will develop.	☐	☐	☐	☐	☐
In teaching sessions for this course, I deliberately provoke debate and discussion.	☐	☐	☐	☐	☐
I structure my teaching in this course to help students to pass the formal assessment items.	☐	☐	☐	☐	☐
I think an important reason for running teaching sessions in this course is to give students a good set of notes.	☐	☐	☐	☐	☐
In this course, I provide the students with the information they will need to pass the formal assessments.	☐	☐	☐	☐	☐
I should know the answers to any questions that students may put to me during this course.	☐	☐	☐	☐	☐
I make available opportunities for students in this subject to discuss their changing understanding of the course.	☐	☐	☐	☐	☐
It is better for students in this course to generate their own notes rather than copy mine.	☐	☐	☐	☐	☐
A lot of teaching time in this course should be used to question students' ideas.	☐	☐	☐	☐	☐
In this course my teaching focuses on the good presentation of information to students.	☐	☐	☐	☐	☐
I see teaching as helping students develop new ways of thinking in this course.	☐	☐	☐	☐	☐
In teaching this course, it is important for me to monitor students' changed understanding of the subject matter.	☐	☐	☐	☐	☐
My teaching in this course focuses on delivering what I know to the students.	☐	☐	☐	☐	☐

	Rarely or never true	Sometimes true	True about half the time	Frequently true	Almost always or always true
Teaching in this course should help students question their own understanding of the subject matter.	☐	☐	☐	☐	☐
Teaching in this course should include helping students find their own learning resources.	☐	☐	☐	☐	☐
I present material to enable students to build up an information base in this course.	☐	☐	☐	☐	☐

Please rate the extent to which you agree with the following statements:

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Teaching with new instructional methods such as clickers takes more preparation time than lecturing	☐	☐	☐	☐	☐
I am interested in implementing other strategies than lecturing in my class	☐	☐	☐	☐	☐
Teaching with new instructional methods such as clickers limits how much content can be covered	☐	☐	☐	☐	☐
Group work is more appropriate in the recitation part of the course than in lecture	☐	☐	☐	☐	☐

Section 5. Contextual Factors

Many factors influence instructors as they teach a course. For each item below please select the option that most closely corresponds with your experience.

	Not at all	A little	Somewhat	Very or Extremely
Teaching is a priority in your department	☐	☐	☐	☐
Research is emphasized over teaching in your department	☐	☐	☐	☐
Your department's promotion or tenure pressures influence your teaching	☐	☐	☐	☐
You have very little say in how this course is run	☐	☐	☐	☐
Your department allows you considerable flexibility in the way you teach the course	☐	☐	☐	☐
Required textbooks or syllabus planned by others dictate the teaching methods you select	☐	☐	☐	☐
The textbook that you will choose will dictate the teaching methods you select	☐	☐	☐	☐
Your department rewards faculty for focusing their attention on teaching	☐	☐	☐	☐
The size of the class dictates the teaching methods you select	☐	☐	☐	☐
Your teaching is mostly based on things you learned from your own best teachers	☐	☐	☐	☐
The physical space of the classroom influences the teaching methods you select	☐	☐	☐	☐
The availability of teaching assistants influences the teaching methods you select	☐	☐	☐	☐
Time constraints due to research commitments (e.g., writing grants, doing lab work, etc.) influence your teaching	☐	☐	☐	☐
Time constraints due to administrative or service commitments (e.g., as a department chair, chair of a departmental/institutional committee, director of a center, etc.) influence your teaching	☐	☐	☐	☐

	Not at all	A little	Somewhat	Very or Extremely
The level of student preparation influences the teaching methods you select	☐	☐	☐	☐
Teaching evaluations based on students ratings influence the teaching methods you select	☐	☐	☐	☐
The ability to cover all necessary content influences the teaching methods you select	☐	☐	☐	☐
Your knowledge of appropriate instructional methods influences the teaching methods you select	☐	☐	☐	☐

How much do your departmental colleagues have expectations for your teaching methods?

Not at all i.e., no expectations

Very little i.e., casual conversations around department mention what one is expected to do

Some i.e., expectations are common knowledge in your department

Quite a bit i.e., colleagues would speak to you if you weren't acting in line with expectations

A great deal i.e., strong expectations to act a certain way. There would be significant negative implications if expectations are not met.

	Not at all	Very little	Some	Quite a bit	A great deal
Expectation to use techniques other than lecturing	☐	☐	☐	☐	☐
Expectation to have students be actively involved in class	☐	☐	☐	☐	☐
Expectation to use a variety of teaching methods	☐	☐	☐	☐	☐