

Student and Instructor Perceptions of the Learning Environment Survey (LENS)

1) Purpose of Research Project

The purpose of this research project is to evaluate the efficacy of the Learning Environment Survey (LENS) system of course evaluations (see Appendix C). The study will use the LENS system at the end of the Spring 2021 term for a number of courses (approximately 50-100) in conjunction with the standard Student Evaluation of Instruction (SEI) instrument. Instructors will initially be recruited into the study using a Qualtrics survey (Appendix F). We will obtain informed consent of those instructors (see Appendix B) and collect basic demographic information as part of the recruitment process. The students in those instructors' classes will then be sent an invitation to participate in the study and take the LENS survey for that course. The LENS survey will include an informed consent form (see Appendix A) and a request for the student's email address. The LENS survey will also include a set of follow-up questions regarding the student's experiences with and impressions of the LENS system (See Appendix D). We will then provide the course instructors with the feedback from the LENS system and ask them a series of follow-up questions regarding their impressions of the LENS instrument (See Appendix E). Student responses to the LENS instrument will be linked to their SEI-data by Institutional Research (using their email addresses) who will also provide deidentified demographic information for further analysis (Student email address will be replaced by a dummy ID).

2) Characteristics of Participants

There are two populations from which we will be gathering data: 1) UW-La Crosse students and 2) UW-La Crosse faculty. We anticipate gathering data from approximately 1500 students in 50 classes. This sample should be broadly representative of the population of UW-La Crosse students. Any selection effects among the students should be similar to those demonstrated in the normal administration of SEIs. We anticipate gathering data from approximately 40 instructors at UW-La Crosse. Those instructors will be recruited on a volunteer basis.

3) Necessity of Vulnerable Populations

There are no vulnerable populations in this research project.

4) Informed Consent

We will be obtaining informed consent from both students and faculty members who participate in this research. Faculty members who volunteer to participate in this research project will complete a consent form upon enrolling in the project (see below). Students who participate in this research project will complete an informed consent form before completing the LENS survey. (See Appendixes A and B).

5) Confidentiality

While the identity of the instructors who participate in this study will be recoded prior to any analysis, given the small size of the sample, we cannot guarantee anonymity. However, all participants identities and responses will be kept confidential by the researchers. No identifying information will be included in any results that are presented or published from this study.

Student data will be recoded with a dummy ID prior to analysis, making their responses and data anonymous. We acknowledge that there is the possibility of uncovering student identities in classrooms through the use of their demographic information, particularly in smaller classes. However, the student demographic information will **NOT** be shared with the instructors. Instructors will only receive anonymous and aggregated responses to the LENS survey.

6) Anticipated Risks

There are no foreseeable risks involved with participants.

7) Procedures to Minimize Potential Risks

As there are no foreseeable risks involved, no procedures will be taken other than those described above to establish anonymity and confidentiality where possible.

8) Possible Benefits

There are a number of issues and shortcomings associated with the current SEI instrument utilized at UWL. Multiple recent high-quality meta-analyses have shown that SEI scores generally fail to correlate with student learning. Additionally, numerous studies have demonstrated that SEI scores are highly sensitive to implicit bias against instructors of color and female instructors. Therefore, the use of SEI scores in personnel decisions could qualify as a discriminatory practice at UWL. Finally, many UWL instructors report stress and anxiety due to both the use of SEIs in personnel decisions and in receiving low scores and/or negative student comments while most UWL instructors (>70%) do not find SEIs useful for teaching development. The LENS system was initially developed by Dr. Zinta Byrne, an organizational psychologist at Colorado State University. It is based on the *Seven Principles for Good Practice in Undergraduate Education*, originally described by Chickering and Gamson in 1987. The UWL Ad Hoc Faculty Senate SEI Committee has further refined the instrument for use in UWL classrooms. It is designed to allow students to describe and evaluate their own experiences with and impressions of the learning environment, rather than directly evaluating their own learning or the effectiveness of their instructor, which they are not qualified to do as they haven't achieved mastery of the discipline, nor are they experienced teachers. The LENS instrument is potentially a marked improvement over the current SEI instrument. It will potentially generate better feedback for the improvement of instruction while also reducing the amount of bias expressed in student evaluations of their learning experience. This research will contribute to the further development of the LENS instrument and directly test its utility.

APPENDIX A: Student Informed Consent

Protocol Title: Student and Instructor Perceptions of the Learning Environment Survey (LENS)

Principal Investigators:

Jennifer Klein (Biology)
Adam Driscoll (Sociology and Criminal Justice)
Tesia Marshik (Psychology)
Alder Yu (Biology)
Alysa Remsburg (Environmental Studies)
Nabamita Dutta (Economics)
Bryan Kopp (English, CATL)
Samuel Ott (Student Senate Representative)

Purpose and Procedure:

The purpose of this study is to explore the perceived utility of a new learning environment survey (LENS), which may eventually serve as a replacement for the traditional student evaluations of instruction (SEIs) at UWL. Participation in this study will involve completing the new LENS for participating courses, in addition to the traditional SEI at the end of the semester. You will also be asked to provide feedback about the new learning environment survey. Both surveys will be administered online. The total estimated time commitment is 10-20 minutes.

Rights and Confidentiality:

- Your participation is voluntary. You can withdraw from the study at any time for any reason, or refuse to answer any question, without penalty.
- Your identity will be kept confidential to the extent provided by law. You will be asked to provide your UWL email address so that we may link your responses to both course surveys. If you provide your email, we will also request your demographic information from the Office of Institutional Research. However, once all of the data are combined, your email address will be replaced with a unique and confidential code.
- Given that this study involves student feedback for courses, group-level data will be shared with instructors, but no identifiable information will be included. The results of this study may also be published in scientific literature or presented at professional meetings using grouped data only. Thus, in either case, your responses will be presented anonymously.

Potential Risks and Benefits:

There are no risks associated with participation in this study. At the discretion of your instructor, you may receive course credit or extra credit for your participation in this study. Your feedback may enable us to develop a more useful course evaluation survey.

Questions regarding study procedures may be directed to the first principal investigator: Jennifer Klein (jklein@uwlax.edu; 608-785-8251). Questions about your rights as a research participant may be directed to the UWL Institutional Review Board (608-785-8124 or irb@uwlax.edu).

If you agree to participate, then please click on the link below. By clicking on the link below, you are consenting to participate in the study.

APPENDIX B: Instructor Informed Consent

Protocol Title: Student and Instructor Perceptions of the Learning Environment Survey (LENS)

Principal Investigators:

Jennifer Klein (Biology)
Adam Driscoll (Sociology and Criminal Justice)
Tesia Marshik (Psychology)
Alder Yu (Biology)
Alysa Remsburg (Environmental Studies)
Nabamita Dutta (Economics)
Bryan Kopp (English, CATL)
Samuel Ott (Student Senate Representative)

Purpose and Procedure:

The purpose of this study is to explore the perceived utility of a new learning environment survey (LENS), which may eventually serve as a replacement for the traditional student evaluations of instruction (SEIs) at UWL. Your participation in this study will involve the following:

- (1) You will be asked to provide your name and course information via an online Qualtrics survey so that we may recruit your students to complete the LENS, in addition to the traditional SEI measure, towards the end of the semester.
- (2) You will be asked to provide us with access to your LENS and SEI data for the purposes of evaluating and comparing both measures.
- (3) You will be asked to provide feedback on the LENS via an anonymous online survey link at the end of the semester, after you have received your SEI and LENS feedback.
- (4) You will be asked to provide demographic information so that we may potentially compare responses across groups.

We estimate that your total time commitment (to complete both surveys) is approximately 20 minutes.

Rights and Confidentiality:

- Your participation is voluntary. You can withdraw from the study at any time for any reason, or refuse to answer any question, without penalty.
- Your identity will be kept confidential to the extent provided by law. In the first online survey, we will ask for identifying information so that we can recruit your students to participate and to allow us to connect your demographic information to student responses. Once we link the data files, we will replace your name with a unique code.
- The results of this study may be presented locally, published in scientific literature, or presented at professional meetings using grouped data only. We will never share your individual LENS or SEI data.

Potential Risks and Benefits:

There are no risks associated with participation in this study. Your feedback may enable us to develop a more useful and meaningful course evaluation survey.

Questions regarding study procedures may be directed to the first principal investigator: Jennifer Klein (jklein@uwlax.edu; 608-785-8251). Questions about your rights as a research participant may be directed to the UWL Institutional Review Board (608-785-8124 or irb@uwlax.edu).

If you agree to participate, then please click on the link below. By clicking on the link below, you are consenting to participate in the study.

Appendix C: LENS Course Evaluation Instrument

UW-La Crosse End-of-Semester Learning Environment Survey

The UW-La Crosse Learning Environment Survey (LENS) assesses your overall experience of the learning environment in this course this semester. Reflect on your personal experience of the environment - not how you perceive others experienced it or what your classmates told you they experienced.

Q1. First, how do you think the online aspect of the learning environment affected your learning

in this course?

- Extremely positively
- Somewhat positively
- Neither positively nor negatively
- Somewhat negatively
- Extremely negatively
- Not Applicable

Q2. (Optional): Explain your answer to the above question. If possible, please include specific examples.

Q3. Recognizing there may be some overlap, of the time you spent on this course, what percentage was allocated to each of the following? (some can be 0, but total must =100%)

Lecture (live or recorded): _____

Discussion (in-person or online): _____

Guided activities (live virtual or in-person: such as solving problems, completing exercises, lab work, and/or other hands-on activities): _____

Independent homework activities (such as solving problems, completing exercises, lab work, or other hands-on activities): _____

Major course projects (such as term papers, research projects, community engagement projects, etc): _____

Assigned readings: _____

Watching content videos (not lecture): _____

Other: : _____

Total : _____

Q4. To what extent did the following course components contribute positively to your learning?

	not at all	slightly	somewhat	moderately	a lot	NOT APPLICABLE
Lecture (live or recorded)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discussion (live or online)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Guided activities (live virtual or in-person: such as solving problems, completing exercises, lab work, and/or other hands-on activities)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Independent homework activities (such as solving problems, completing exercises, lab work, or other hands-on activities)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Major course projects (such as term papers, research projects, community engagement projects, etc)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assigned readings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Content videos (not lecture)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q5. Which of the following activities/strategies did you use to enhance your own learning in this course? (select all that apply):

- read most or all assigned content
- actively read assigned content (e.g., paused, reflected, predicted, summarized, tested your understanding as you went along, etc)
- took your own notes from the book or other course materials
- studied with a partner
- practiced explaining course content to someone else
- made/used flashcards (paper or electronic)
- watched most or all course videos
- contacted the instructor via email to ask questions
- talked to the instructor during office hours or a meeting
- reviewed learning objectives
- practiced answering study guide questions
- completed instructor- or textbook-provided practice quizzes
- quizzed yourself (i.e., created your own quiz questions)
- came up with your own personal examples of course concepts
- practiced summarizing major ideas and concepts in your own words
- actively participated in class discussions

Q6. (Optional): Describe what else you did (or could have done) to contribute to a positive learning experience in this course.

Q7. On average, how many hours per week did you spend on this course? (include time spent in class, reading, watching videos, completing assignments, studying, etc)

Q8. In my experience, the workload in this course was...

- Not enough
- Easily manageable
- Challenging, but manageable
- Overwhelming; not manageable

Q9. (Optional): Explain your answer to the above question. If possible, please include specific examples.

Q10. In my experience, working together with other students in this course (through discussions, activities, and/or projects) was...

- Not supported or facilitated
- Somewhat supported or facilitated
- Strongly supported and facilitated

Q11. (Optional): Explain your answer to the above question. If possible, please include specific examples.

Q12. I felt comfortable contributing to class discussions and/or activities.

- True
- Neither true nor false
- False

Q 13. (Optional): Explain your answer to the above question. If possible, please include specific examples.

Q 14. In my experience of the learning environment, asking questions related to the course was...

- Judged negatively
- Not judged
- Judged positively

Q 15. (Optional): Explain your answer to the above question. If possible, please include specific examples.

Q 16. I felt that the expectations for my performance in this course were:

- Too low
- Achievable
- High but achievable
- Too high, not achievable

Q 17. (Optional): Explain your answer to the above question. If possible, please include specific examples.

Q 18. Course objectives refer to statements (typically in the syllabus) that describe what you should learn or be able to do by the end of the course. In my experience, I felt I was being evaluated based on...

- the course objectives
- the course objectives, in addition to other unstated expectations
- stated expectations other than the course objectives
- unstated expectations

Q 19. (Optional): Explain your answer to the above question. If possible, please include specific examples.

Q 20. Feedback consists of any grades, suggestions, or comments received on your performance, learning, and/or behaviors throughout the course. In your experience how would you describe the usefulness of the feedback you received in this course?

- I haven't received feedback yet
- Not useful
- Somewhat useful
- Useful

Q 21. (Optional): Explain your answer to the above question. If possible, please include specific examples.

Q 22. I had the same opportunities in this course as other students did.

True

False

Q 23. (Optional): Explain your answer to the above question. If possible, please include specific examples.

Q 24. (Optional): If you have any additional comments you would like to make about the learning environment in this course, please do so here and be specific. Please focus your comments on the learning environment and content of the course (i.e., assignments and materials) and not unrelated matters (such as the instructor's appearance).

Appendix D: Follow-up Questions for Students

Q 25. Now that you've completed the new Learning Environment Survey, we'd like your feedback on the survey itself. Choose the option that best describes your opinion of the Learning Environment Survey (LENS) you just completed.

	Disagree	Neutral	Agree
I was able to provide a sufficient amount of feedback.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was able to provide feedback about all of the specific aspects of the class I wanted to address.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The options presented on the survey allowed me to convey an accurate picture of my experiences in the class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The survey structure and content allowed me to express any concerns I had about the learning environment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q 26. (Optional): Please explain your ratings above. If possible, provide specific examples.

Q 27. In my opinion, the length of the learning environment survey was:

- too short
- fine or "just right"
- too long

Q 28. (Optional): Describe how the learning environment survey could be improved (for example: what was missing, if any questions were unclear, etc.) Please be as specific as you can.